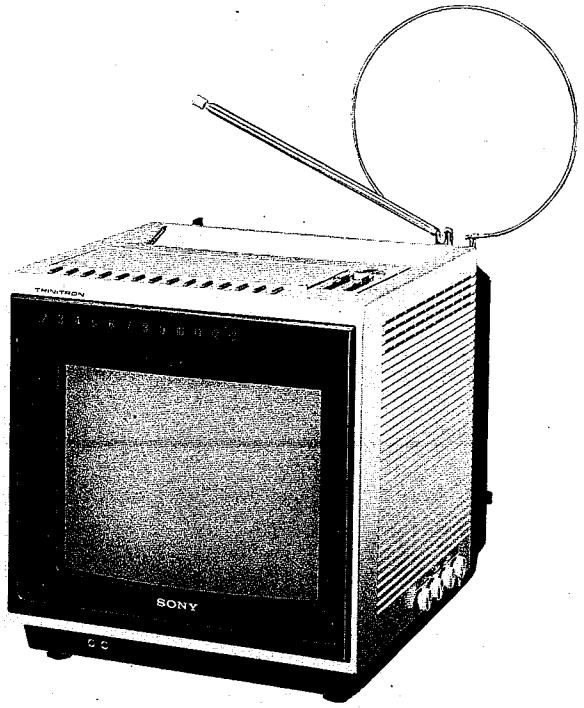
2350

KV-9400

US Model

Chassis No. SCC-274A-A



TRINITRON® COLOR TV

SPECIFICATIONS

Television System:	American TV standards
Color System:	NTSC
Picture Tube:	22 cm, 9" (screen measured diagonally), 90° deflection TRINITRON system
Semiconductors:	22 transistors, 1 FET, 8 ICs and 39 diodes
Antennas:	VHF: 300 Ω balanced 75 Ω unbalanced (telescopic antenna) (including slide switch) UHF: 300 Ω balanced (loop antenna*) *Note: Supplied with accessories
Channel Coverage:	VHF channels: 2 – 13 UHF channels: 14 – 83 (a total of up to 14 preselected channels)
Intermediate Frequencies:	Picture i-f carrier: 45.75 MHz Color subcarrier: 42.17 MHz Sound i-f carrier: 41.25 MHz
Sound System:	4.5 MHz intercarrier Output power: 1W (max.) Speaker: 8 x 12 cm ($3^1/_8$ x 4¾ inches) oval, 8 Ω

— Continued on page 2 —

WARNING

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.
THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

SONY®

SERVICE MANUAL

Video System:	R, G, B cathode drive
Automatic Controls:	ABL (automatic brightness limiter) ACC (automatic color control) ACK (automatic color killer) ADG (automatic degaussing) AFC (automatic frequency control) AFT (automatic fine tuning) AGC (automatic gain control) ANC (automatic noise canceller) AVR (automatic voltage regulator)
Anode Voltage:	20 kV at zero beam current
Power Requirements:	120 V ac, 60 Hz
Power Consumption:	77 W ac (max.) 57 W ac (average)
Dimensions:	Approx. 267(w) x 285(h) x 333(d) mm 10½(w) x 11¼(h) x 33 1/8 (d) inches
Net Weight:	Approx. 8.3 kg (18 lb 5 oz)
Accessories Supplied:	Earphone (ME-20B) UHF loop antenna (AN-15) Label indicator Instruction manual

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
5. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
6. Check the line cord for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
7. Check the condition of the monopole antenna (if any).
   Make sure the end is not broken off, and has the plastic cap on it. Point out the danger of impalement on a broken antenna to the customer, and recommend the antenna's replacement.
8. Check the B+ and HV to see they are at the values specified. Make sure your instruments are accurate; be suspicious of your HV meter if sets always have low HV.
9. Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

HOW TO FIND A GOOD EARTH GROUND

A cold-water pipe is guaranteed earth ground; the cover-plate retaining screw on most AC outlet boxes is also at earth ground. If the retaining screw is to be used as your earth-ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe with an ohmmeter. The reading should be zero ohms. If a cold-water pipe is not accessible, connect a 60–100 watts trouble light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side of the line, the lamp should light at normal brilliance if the screw is at ground potential. (See Fig. B)

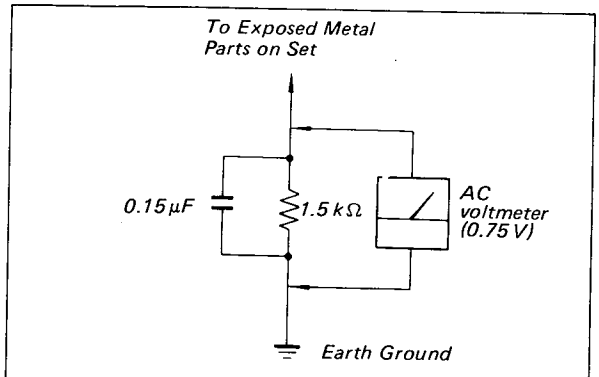


Fig. A. Using an AC voltmeter to check AC leakage.

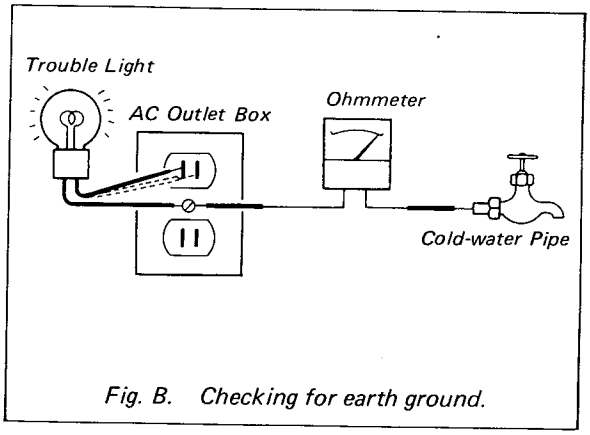
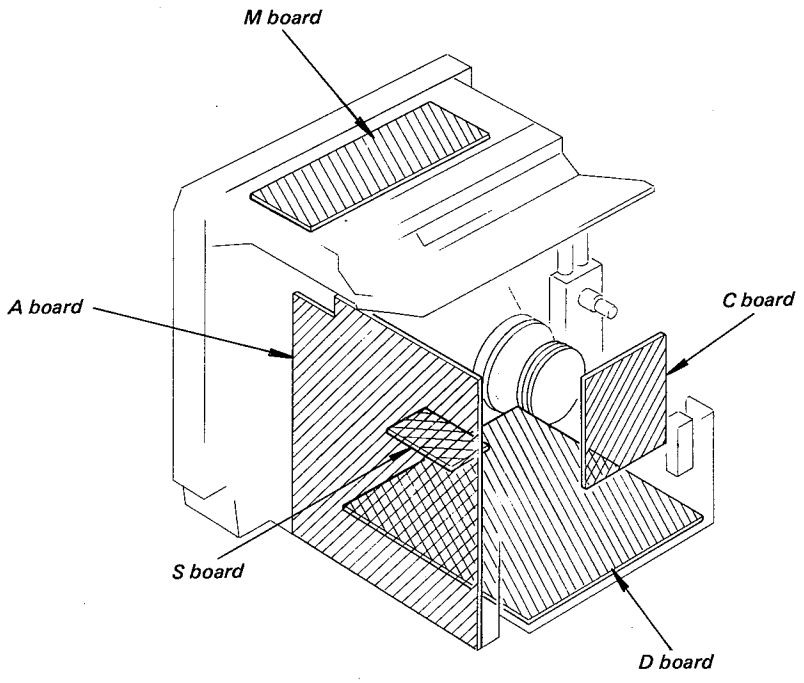


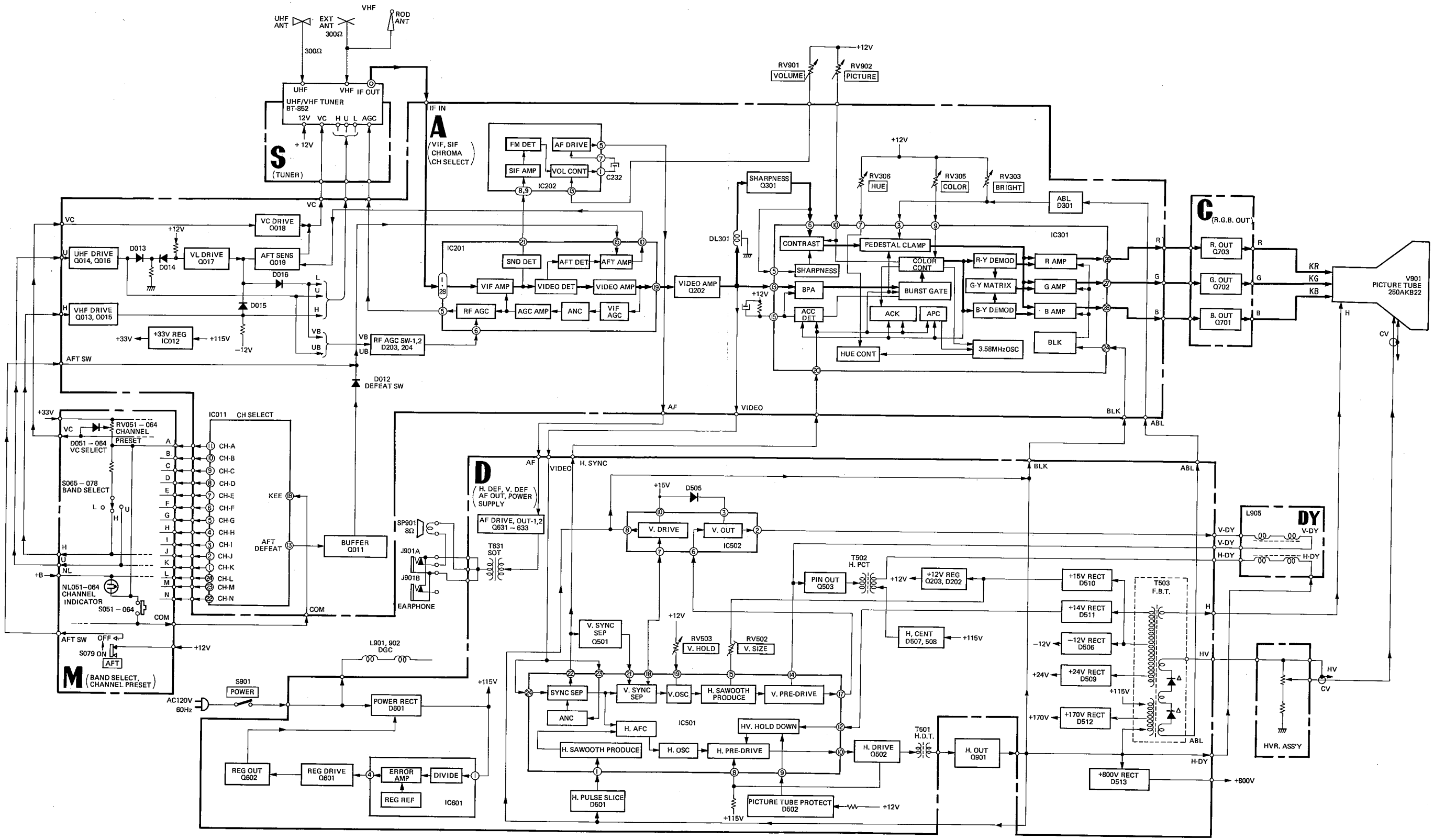
Fig. B. Checking for earth ground.

CIRCUIT BOARDS LOCATION

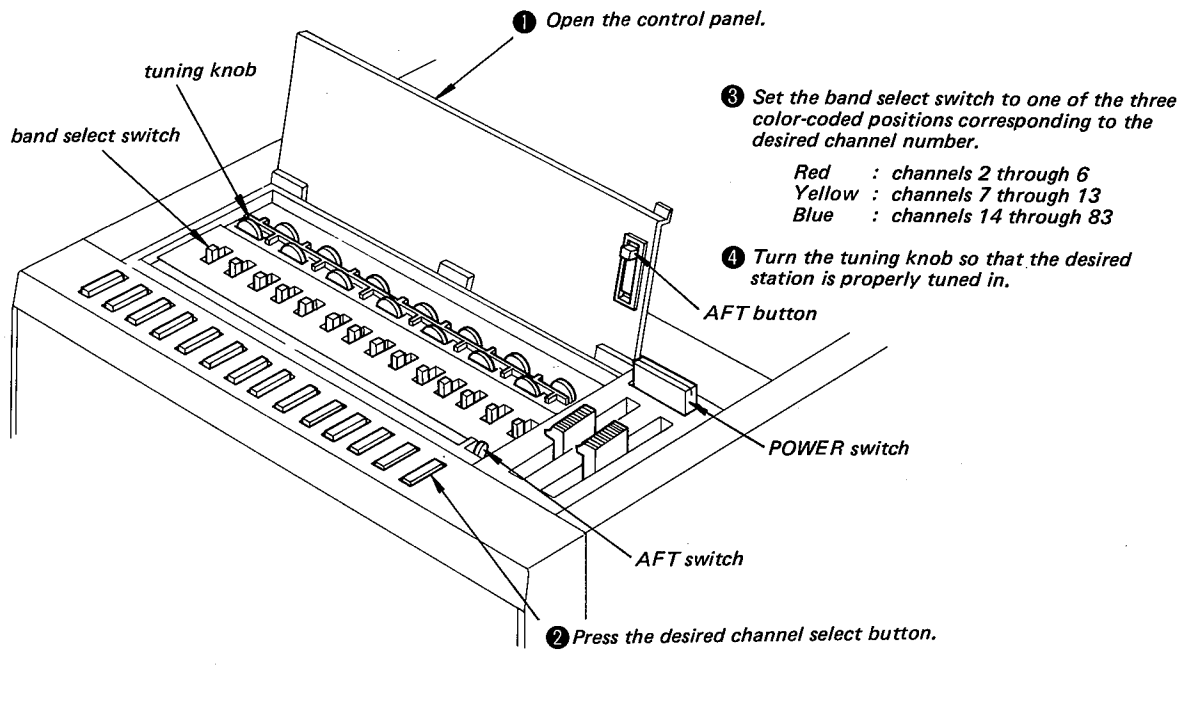


SECTION 1
OUTLINE

1-1. BLOCK DIAGRAM

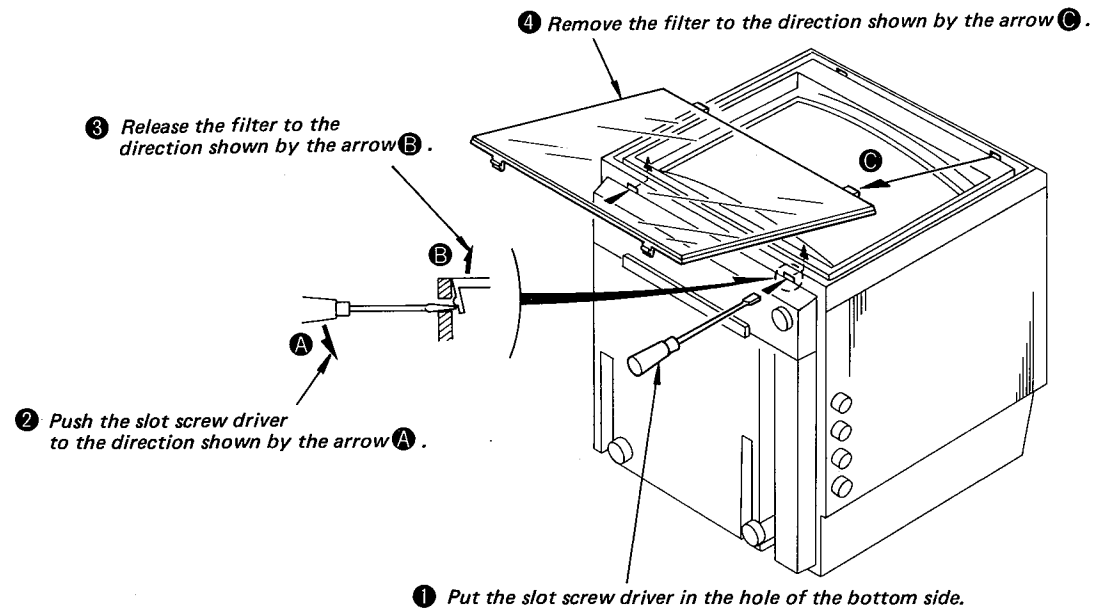


1-2. CHANNEL PRESETTING

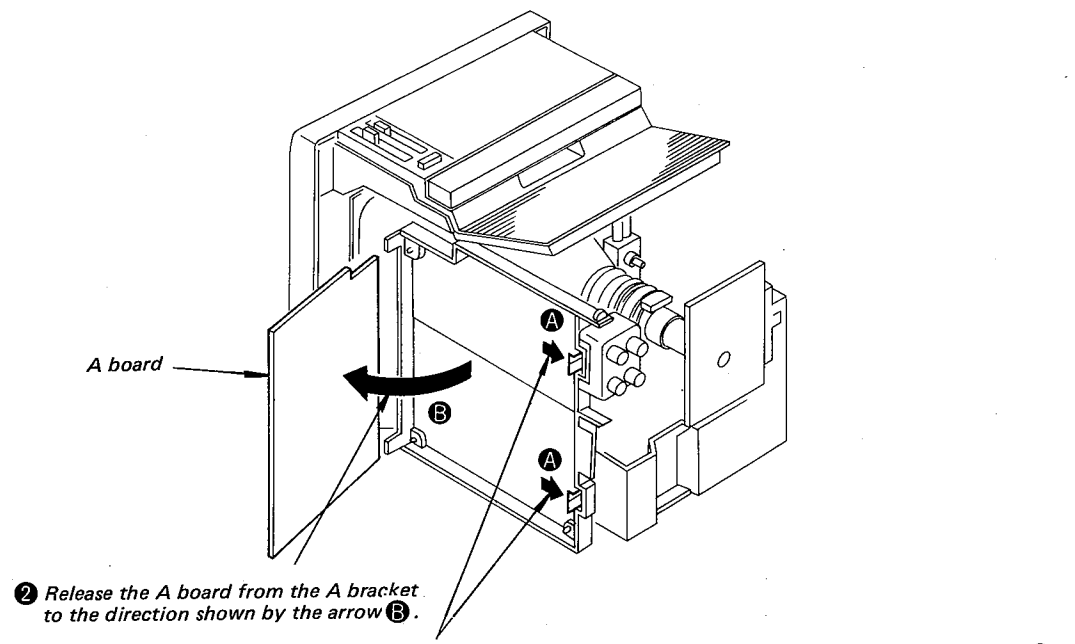

❶ Open the control panel.
tuning knob
band select switch
❸ Set the band select switch to one of the three color-coded positions corresponding to the desired channel number.
Red : channels 2 through 6
Yellow : channels 7 through 13
Blue : channels 14 through 83
❹ Turn the tuning knob so that the desired station is properly tuned in.
AFT button
POWER switch
AFT switch
❷ Press the desired channel select button.

SECTION 2
DISASSEMBLY

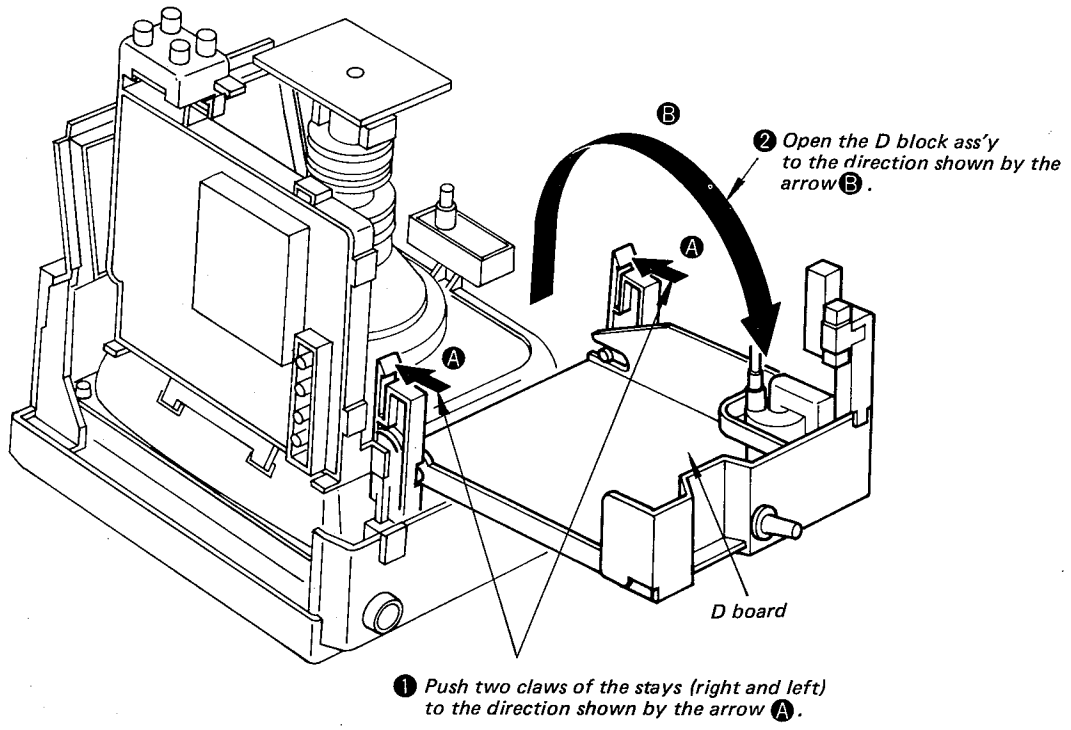
2-1. FILTER REMOVAL


❹ Remove the filter to the direction shown by the arrow Ⓒ.
❸ Release the filter to the direction shown by the arrow Ⓑ.
Ⓑ
Ⓐ
Ⓒ
❷ Push the slot screw driver to the direction shown by the arrow Ⓐ.
❶ Put the slot screw driver in the hole of the bottom side.

2-2. FOR CHECKING A BOARD UP


A board
Ⓐ
Ⓑ
Ⓐ
❷ Release the A board from the A bracket to the direction shown by the arrow Ⓑ.
❶ Push two claws of the A bracket to the direction shown by the arrow Ⓐ.

2-3. FOR CHECKING D BOARD UP

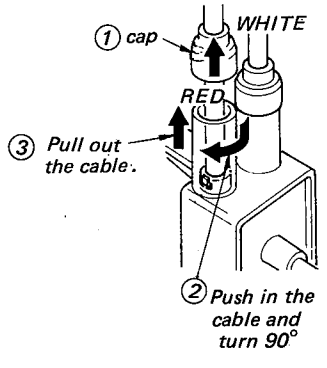


❷ Open the D block ass'y to the direction shown by the arrow Ⓑ.

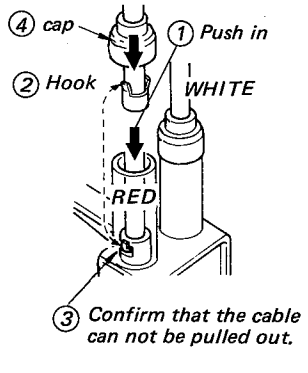
❶ Push two claws of the stays (right and left) to the direction shown by the arrow Ⓐ.

2-4. FBT CABLE (HVR BLOCK) REMOVAL AND INSTALLATION.

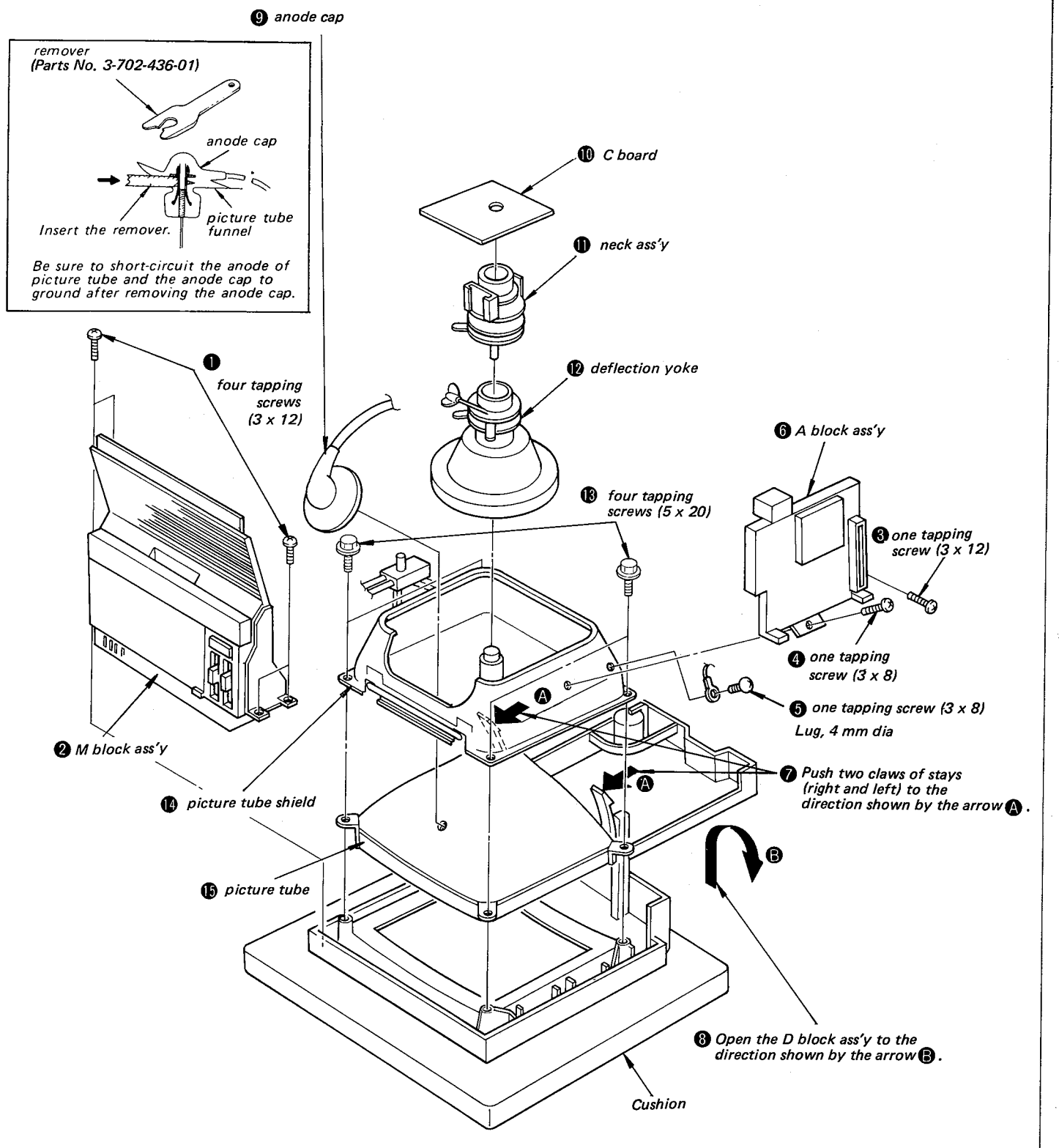
1. REMOVAL



2. INSTALLATION



2-5. PICTURE TUBE REMOVAL


⑨ anode cap
remover
(Parts No. 3-702-436-01)
anode cap
Insert the remover.
picture tube funnel
Be sure to short-circuit the anode of picture tube and the anode cap to ground after removing the anode cap.
⑩ C board
⑪ neck ass'y
⑫ deflection yoke
❶ four tapping screws (3 x 12)
⑬ four tapping screws (5 x 20)
⑥ A block ass'y
③ one tapping screw (3 x 12)
④ one tapping screw (3 x 8)
⑤ one tapping screw (3 x 8)
Lug, 4 mm dia
❷ M block ass'y
⑦ Push two claws of stays (right and left) to the direction shown by the arrow Ⓐ.
⑭ picture tube shield
⑮ picture tube
⑧ Open the D block ass'y to the direction shown by the arrow Ⓑ.
Cushion

SECTION 3
SETUP ADJUSTMENTS

(1) The following adjustments should be made when a complete realignment is required on a new picture tube is installed.
(2) These adjustment should be performed with the rated power supply voltage unless otherwise noted.

Controls and switches should be set as follows:
PICTURE control . . .fully clockwise (maximum)
BRIGHT control . . . .fully leftwards (maximum)
AUTO, AFT switches . . . ON

Make the following adjustments in the order as follows given:

1. Beam Landing
2. Convergence
3. White Balance

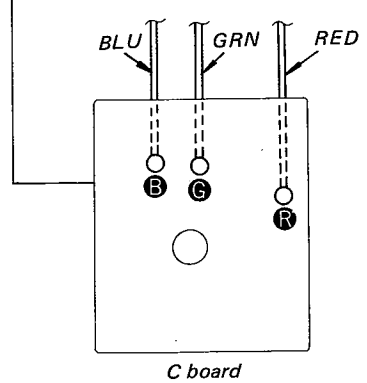
Note: Test Equipment Required.
1. Color-bar/Pattern Generator
2. Degausser

3-1. BEAM LANDING

Preparation:

- Feed in the white pattern.
- Before starting, degauss the entire screen.

1. Loosen deflection yoke screw.
2. Set purity control as shown in Fig. 3-1.
3. Slide deflection yoke as far forward as it will go.
4. Position neck ass'y as shown in Fig. 3-2.
5. Disconnect leads Ⓑ and Ⓖ on the C board.
6. Adjust purity control to center vertical red band as shown in Fig. 3-3.
7. Slide deflection yoke back for a uniform red screen.
8. Check green and blue rasters for uniformity by performing the same way as steps 5, 6 and 7.
   To get a uniform green screen,
   connect lead Ⓖ and disconnect leads Ⓑ and Ⓡ on the C board.
   To get a uniform blue screen,
   connect lead Ⓑ and disconnect leads Ⓖ and Ⓡ on the C board.
   After these checks, connect the leads Ⓑ, Ⓖ and Ⓡ.
9. Tighten the deflection yoke screw.
10. Check if mislanding appears at corners a–d as shown in Fig. 3-4. If mislanding is observed, correct it as shown in Fig. 3-4.
11. Confirm that beam landing is correct when the receiver is faced in all direction.



C board

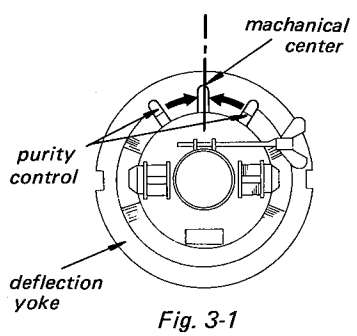


Fig. 3-1

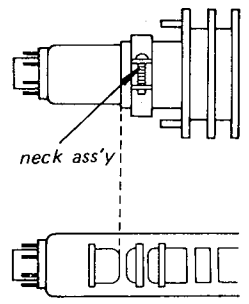


Fig. 3-2.

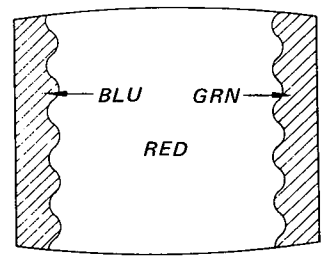


Fig. 3-3.

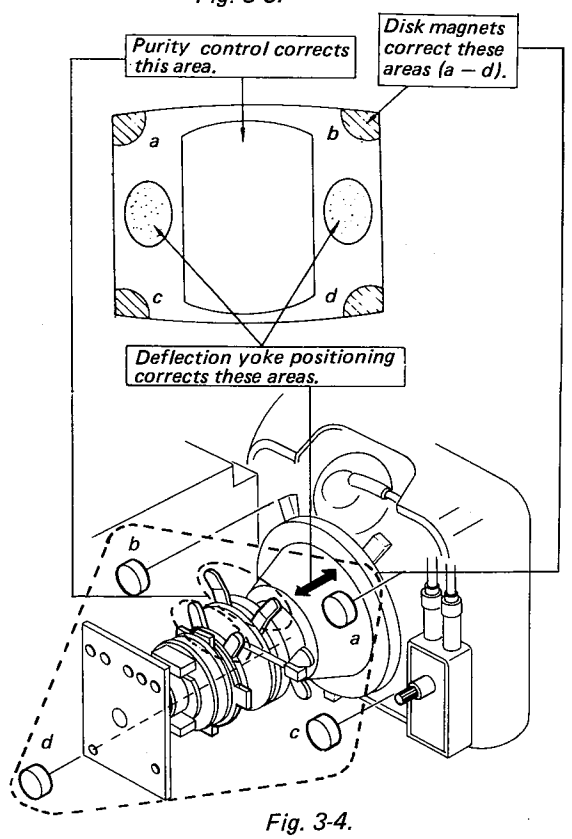


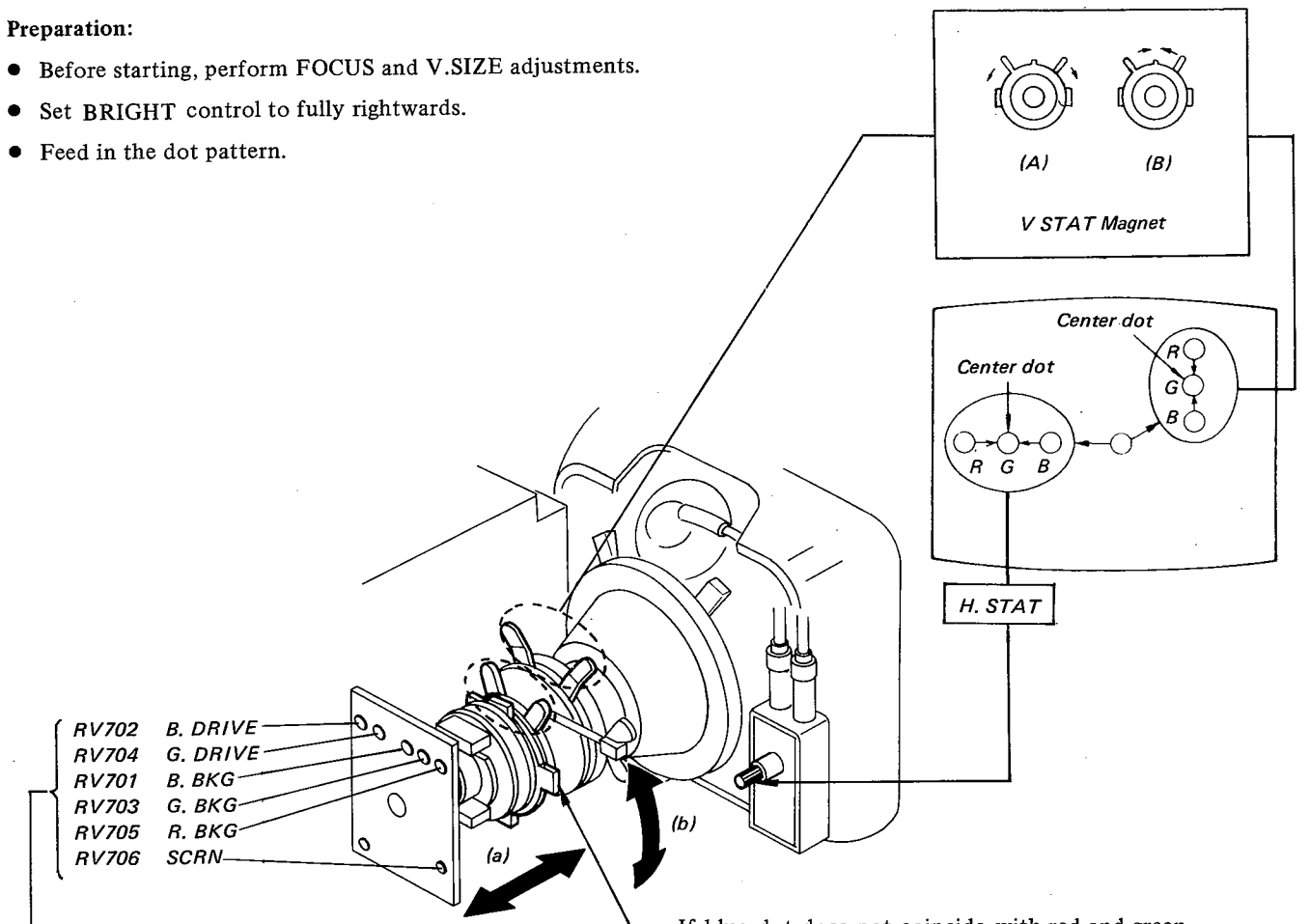
Fig. 3-4.

3-2. CONVERGENCE

Preparation:

- Before starting, perform FOCUS and V.SIZE adjustments.
- Set BRIGHT control to fully rightwards.
- Feed in the dot pattern.

(1) Horizontal and Vertical Static Convergence



If blue dot does not coincide with red and green dots,
Move BMC magnet (a) to correct insufficient H. static convergence.
Rotate BMC magnet (b) to correct insufficient V. static convergence.

In either case, repeat Beam Landing Adjustment.

3-3. WHITE BALANCE

Feed in the cross-hatch pattern.

1. Turn PICTURE control fully counterclockwise, and set BRIGHT control to fully rightwards.
2. Turn RV702 (B. DRIVE) and RV704 (G. DRIVE) fully clockwise.
3. Set RV701 (B. BKG), RV703 (G. BKG), and RV705 (R. BKG) to mechanical center.
4. Turn RV706 (SCRN) slowly to obtain a faintly visible cross-hatch. Note the color that first becomes visible by turning RV706. Do not turn a BKG control for this color.
5. Adjust the other two BKG controls for best white balance (neutral gray) of the faint cross-hatch.
6. Turn PICTURE control fully clockwise, and set BRIGHT control to fully leftwards. Observe the screen and adjust the DRIVE controls for best white balance.
7. Repeat Steps 1 through 6 several times.

(2) Dynamic Convergence Adjustment

Preparation:

- Before starting, perform Horizontal and Vertical Static Convergence Adjustment.

1. Loosen deflection yoke screw.
2. Remove deflection yoke spacers.
3. Move the deflection yoke for best convergence as shown in Fig. 3-5.
4. Tighten the deflection yoke screw.
5. Install the deflection yoke spacers.

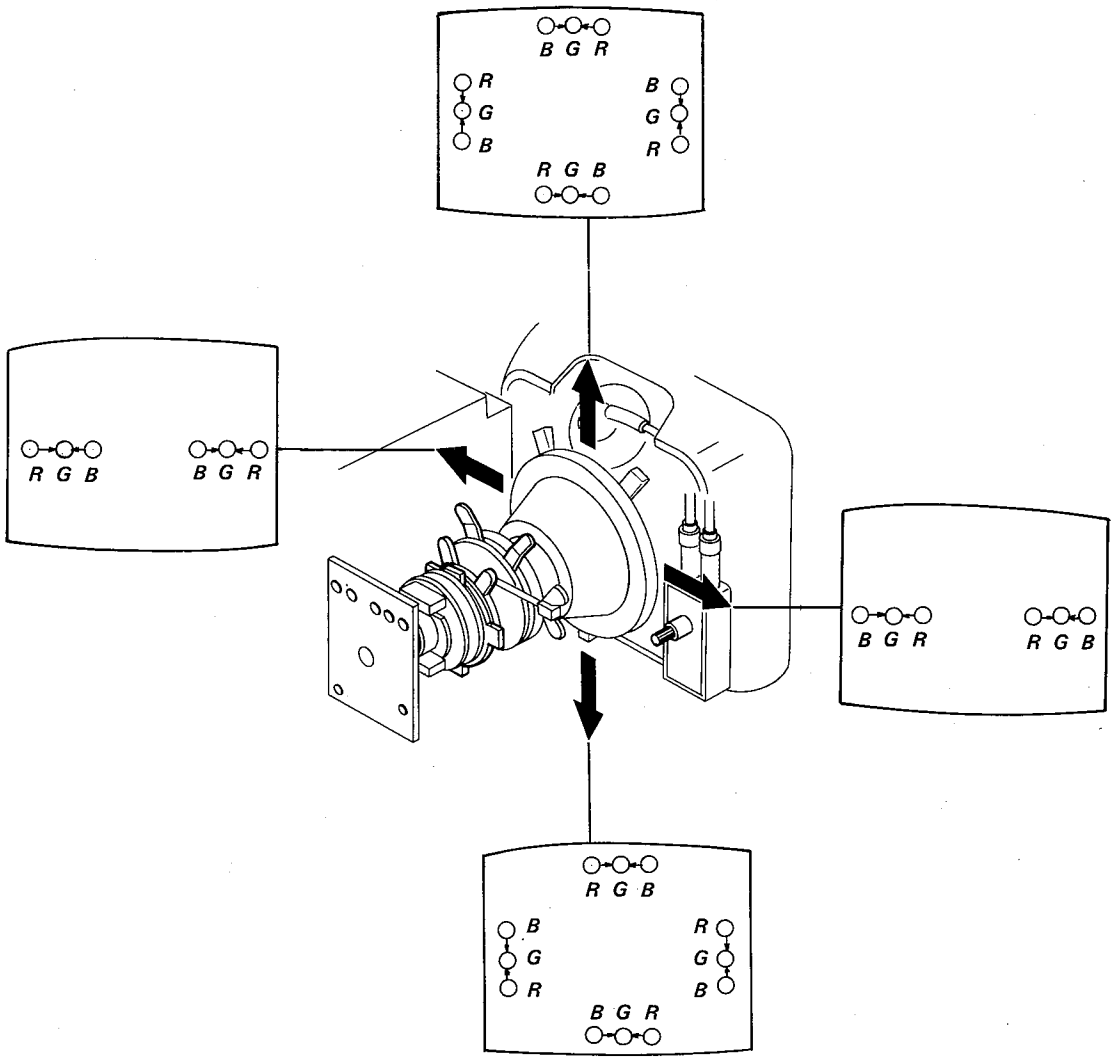


Fig. 3-5

SECTION 4
CIRCUIT ADJUSTMENTS

Note: (1) TEST EQUIPMENT REQUIRED

1. Oscilloscope
2. Digital multimeter
3. Color-bar/pattern generator
4. Variable auto-transformer.
5. Isolation transformer
6. Regurated-dc power supply

(2) INPUT SIGNAL

When making these adjustments, feed in a cross-hatch, color-bar or an off-air signal.

(3) CONTROL AND SWITCH SETTINGS

Controls and switches should be set as follows when making checks and adjustments unless otherwise noted.

PICTURE contrl
HUE control
BRIGHT control
COLOR control
} Set for best picture

AUTO switch . . .ON
AFT switch . . . .ON

(4) These adjustment should be performed with the rated power supply voltage unless otherwise noted.

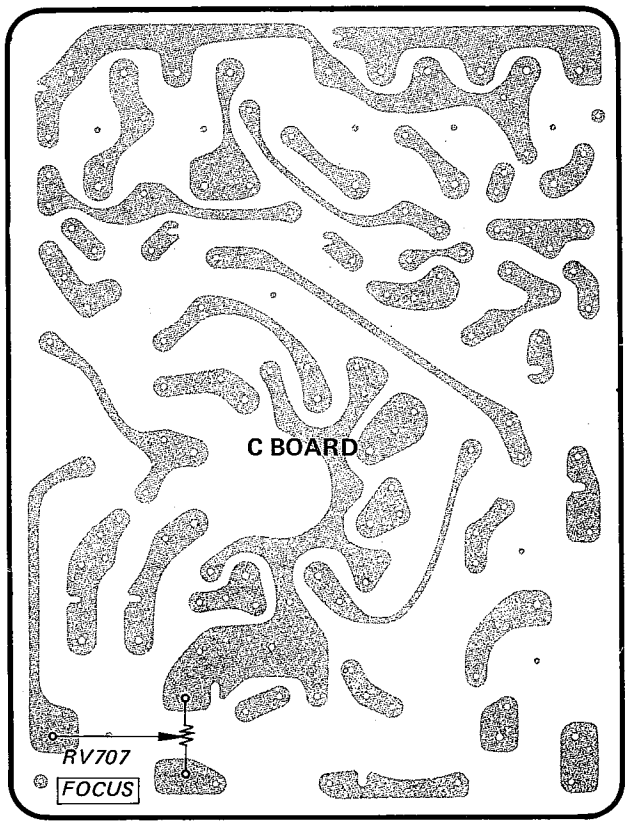
(5) CIRCUIT ADJUSTMENTS

Adjustment	Circuit Board	Page
FOCUS	C	14
SIF	A	15 and 16
AFT		
SUB BRT		
RF AGC		
SUB CONTRAST		
ACC		
COLOR SYNC		
PIN AMP	D	17 and 18
H. FREQ		
CHECK AFTER IC601 REPLACED		
R563 ADJUSTMENT		

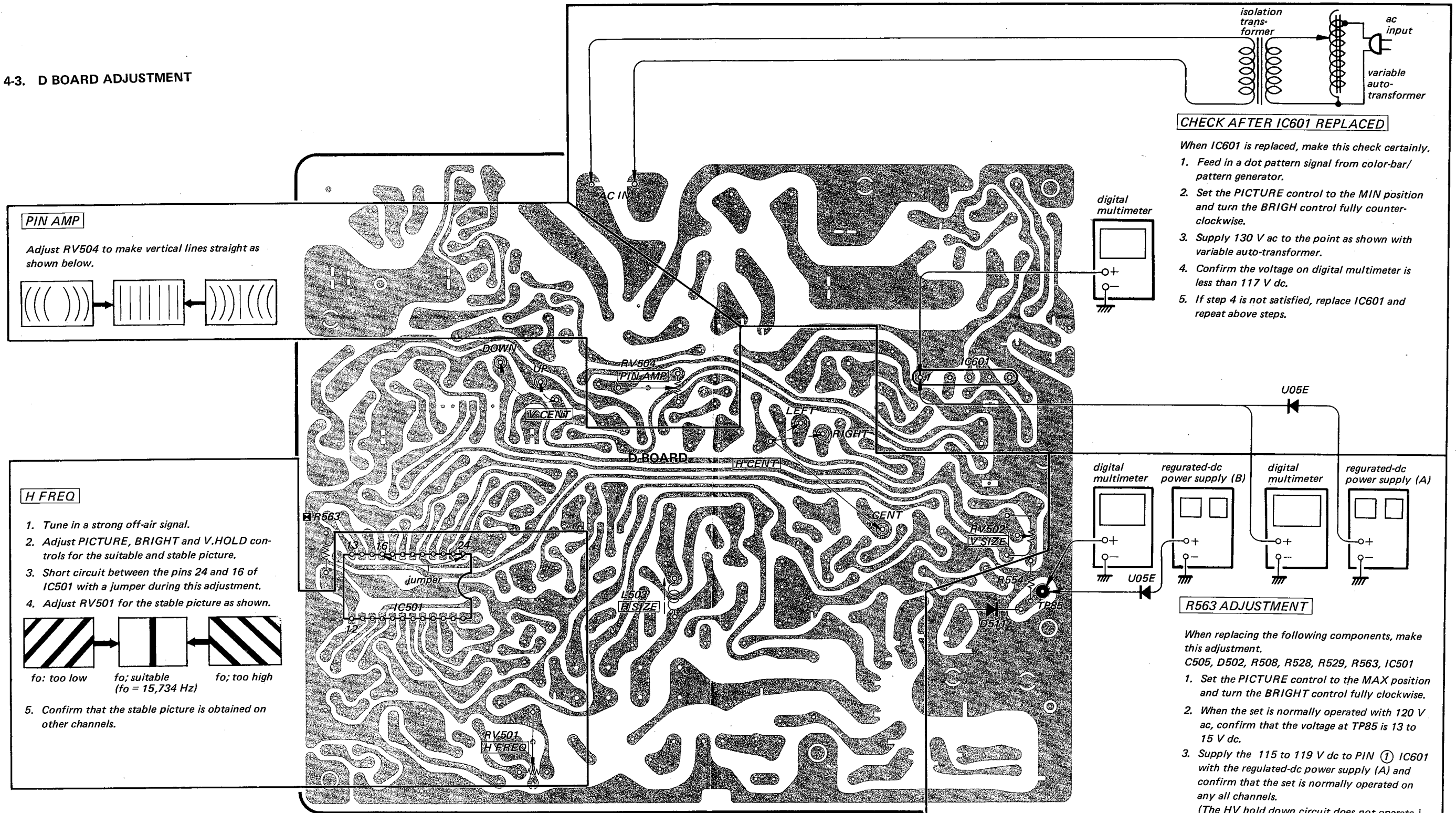
4-1. C BOARD ADJUSTMENT

FOCUS

Adjust RV707 for best Focus.



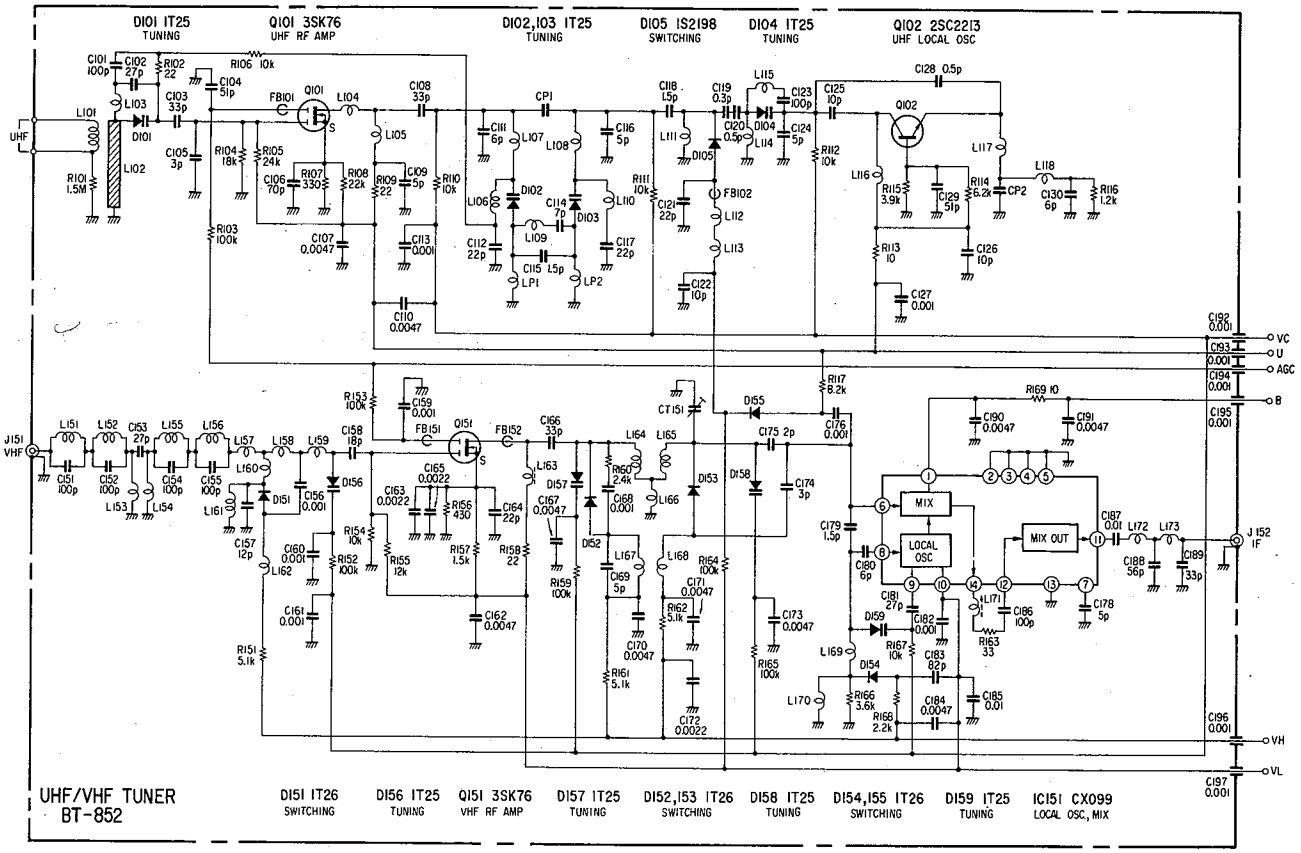
4-3. D BOARD ADJUSTMENT


PIN AMP
Adjust RV504 to make vertical lines straight as shown below.
H FREQ
1. Tune in a strong off-air signal.
2. Adjust PICTURE, BRIGHT and V.HOLD controls for the suitable and stable picture.
3. Short circuit between the pins 24 and 16 of IC501 with a jumper during this adjustment.
4. Adjust RV501 for the stable picture as shown.
fo: too low
fo; suitable (fo = 15,734 Hz)
fo; too high
5. Confirm that the stable picture is obtained on other channels.
AC IN
DOWN
UP
V-CENT
RV504 PIN AMP
LEFT
RIGHT
D BOARD
H-CENT
R563
13
16
24
jumper
IC501
12
L503 H SIZE
RV501 H FREQ
CENT
RV502 V SIZE
R554
D511
TP85
IC601
U05E
isolation trans-former
ac input
variable auto-transformer
digital multimeter
CHECK AFTER IC601 REPLACED
When IC601 is replaced, make this check certainly.
1. Feed in a dot pattern signal from color-bar/ pattern generator.
2. Set the PICTURE control to the MIN position and turn the BRIGH control fully counter-clockwise.
3. Supply 130 V ac to the point as shown with variable auto-transformer.
4. Confirm the voltage on digital multimeter is less than 117 V dc.
5. If step 4 is not satisfied, replace IC601 and repeat above steps.
digital multimeter
regurated-dc power supply (B)
digital multimeter
regurated-dc power supply (A)
U05E
R563 ADJUSTMENT
When replacing the following components, make this adjustment.
C505, D502, R508, R528, R529, R563, IC501
1. Set the PICTURE control to the MAX position and turn the BRIGHT control fully clockwise.
2. When the set is normally operated with 120 V ac, confirm that the voltage at TP85 is 13 to 15 V dc.
3. Supply the 115 to 119 V dc to PIN (1) IC601 with the regulated-dc power supply (A) and confirm that the set is normally operated on any all channels.
(The HV hold down circuit does not operate.)
4. Supply the 16.4 to 16.6 V dc to TP85 with the regulated-dc power supply (B) and confirm that the HV hold down circuit operates.
(When the HV hold down circuit operates, raster disappears.)
Note: As soon as the HV hold down circuit operates, turn the POWER switch to OFF.
5. If steps 2 to 4 are not satisfied, select the resistance value of R563 and repeat above steps.

〔MEMO〕

SECTION 5
DIAGRAMS

5-1. UHF AND VHF TUNER SCHEMATIC DIAGRAM
– BT-852 –



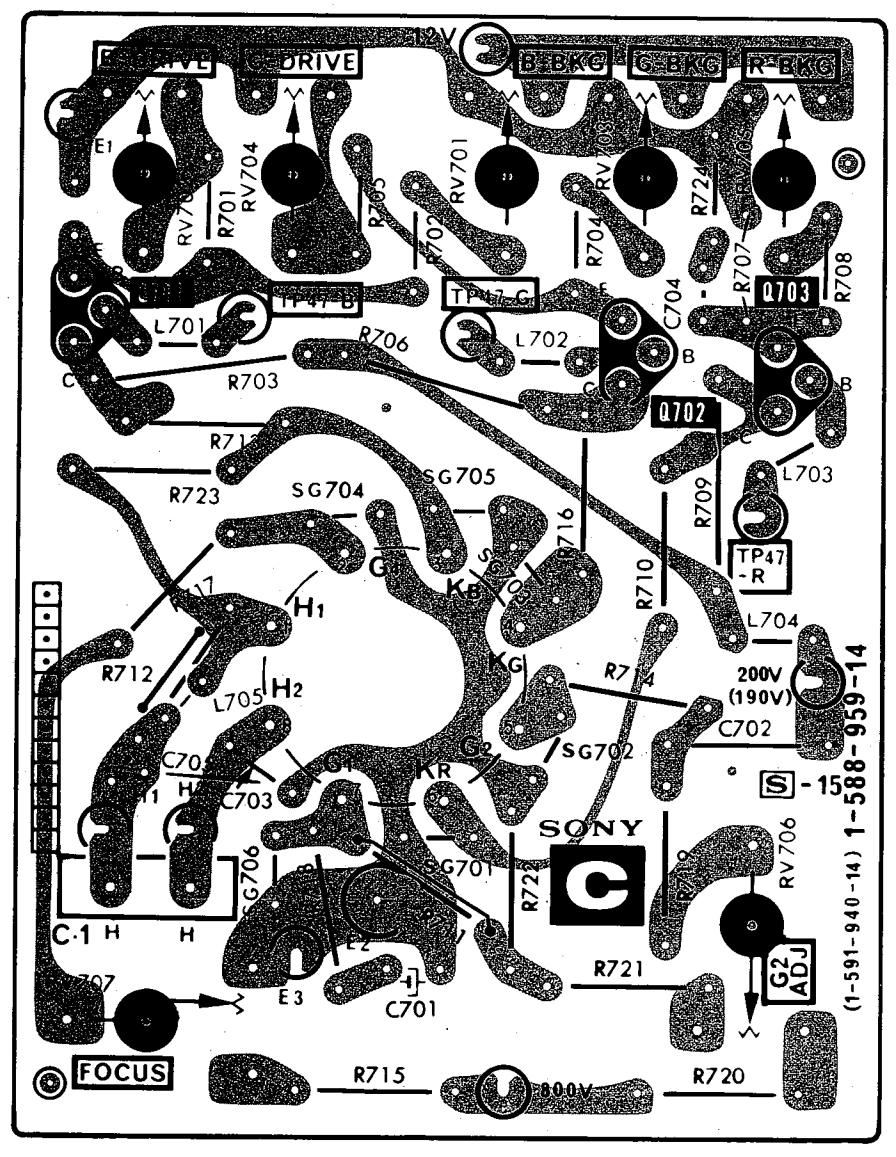
- Tuner reference numbers are not included in the Electrical Parts List (Page 37-43)

5-2. MOUNTING DIAGRAMS

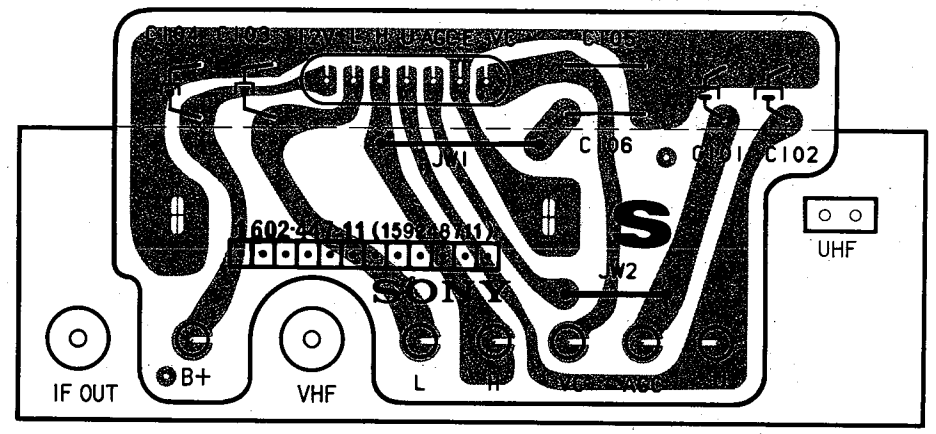
[R, G, B OUT] C

S [TUNER]

– C Board –



– S Board –



M M [BAND SELECT, CHANNEL PRESET]

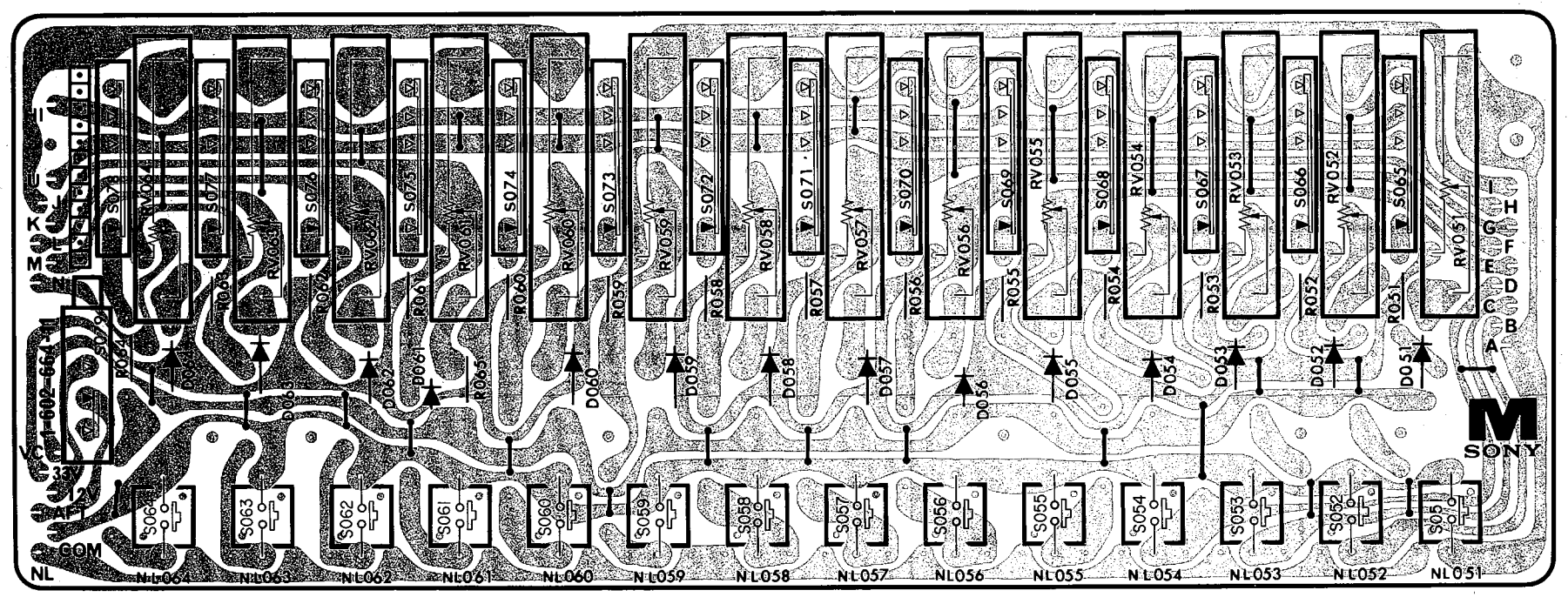
A B C D E F

1

2

3

— M Board —

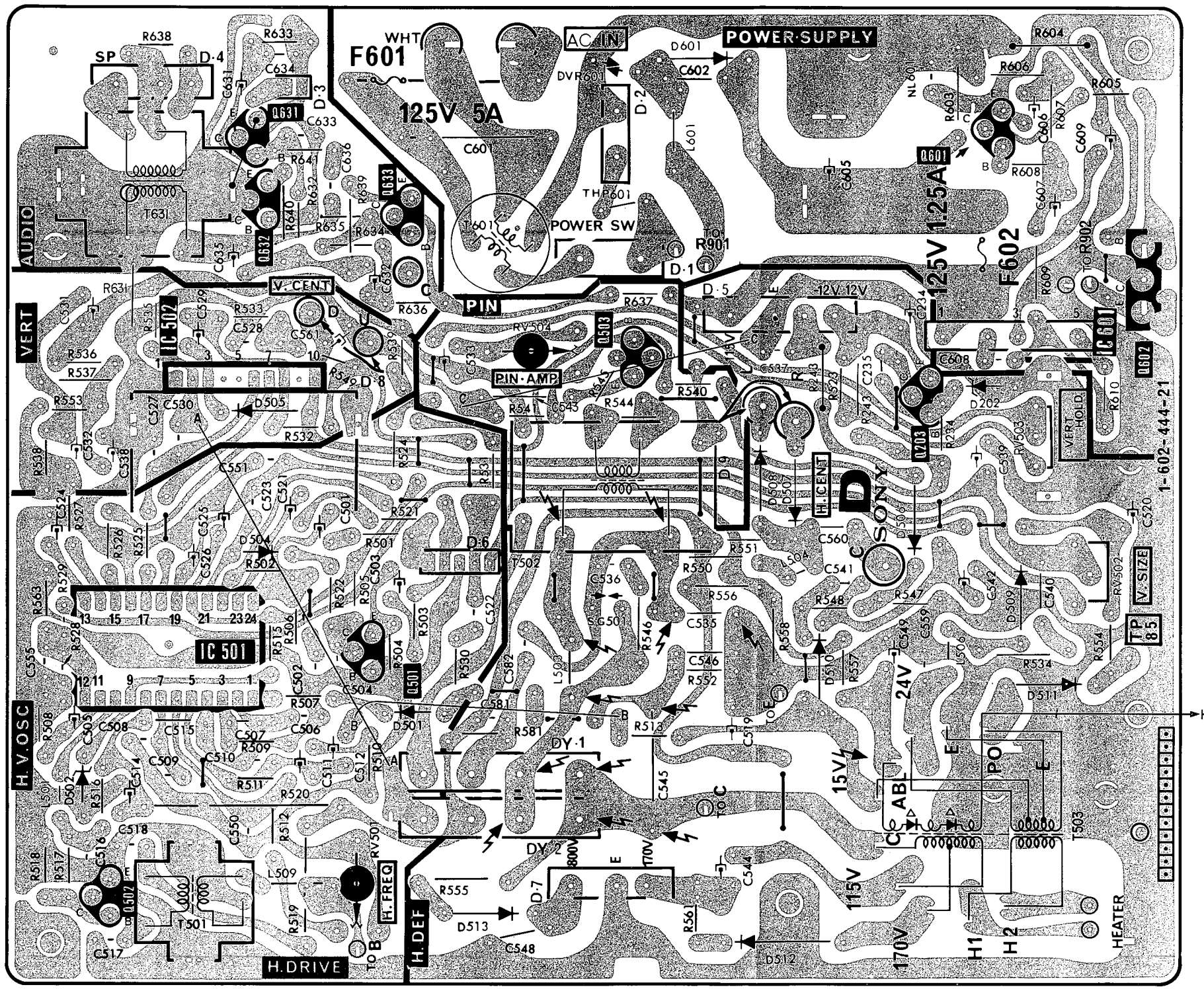


[H. DEF, V. DEF, AF OUT, POWER SUPPLY] D D

A B C D E F G

1 2 3 4 5

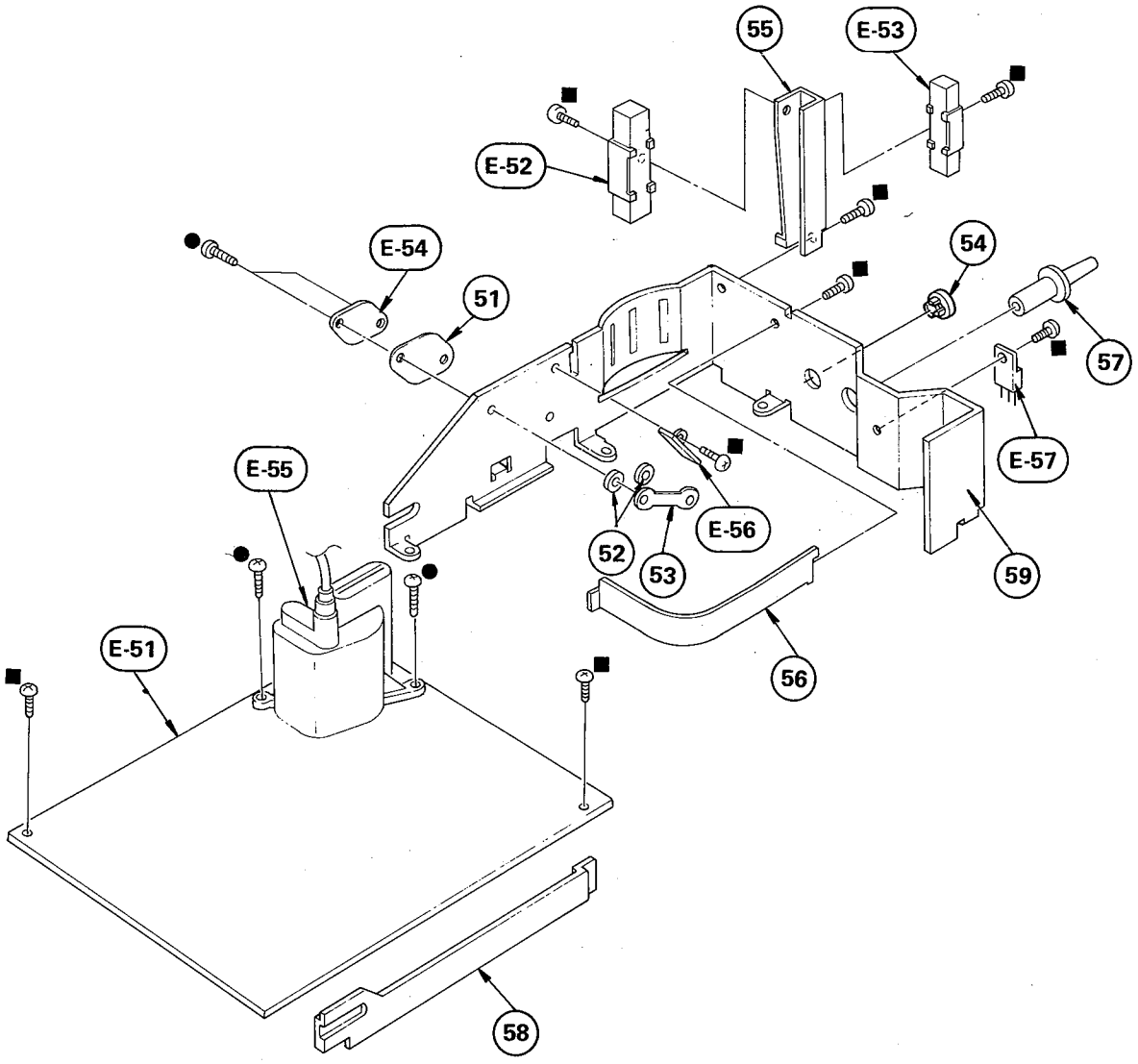
— D Board —



A B C D

1 2 3 4 5

(2) D BOARD

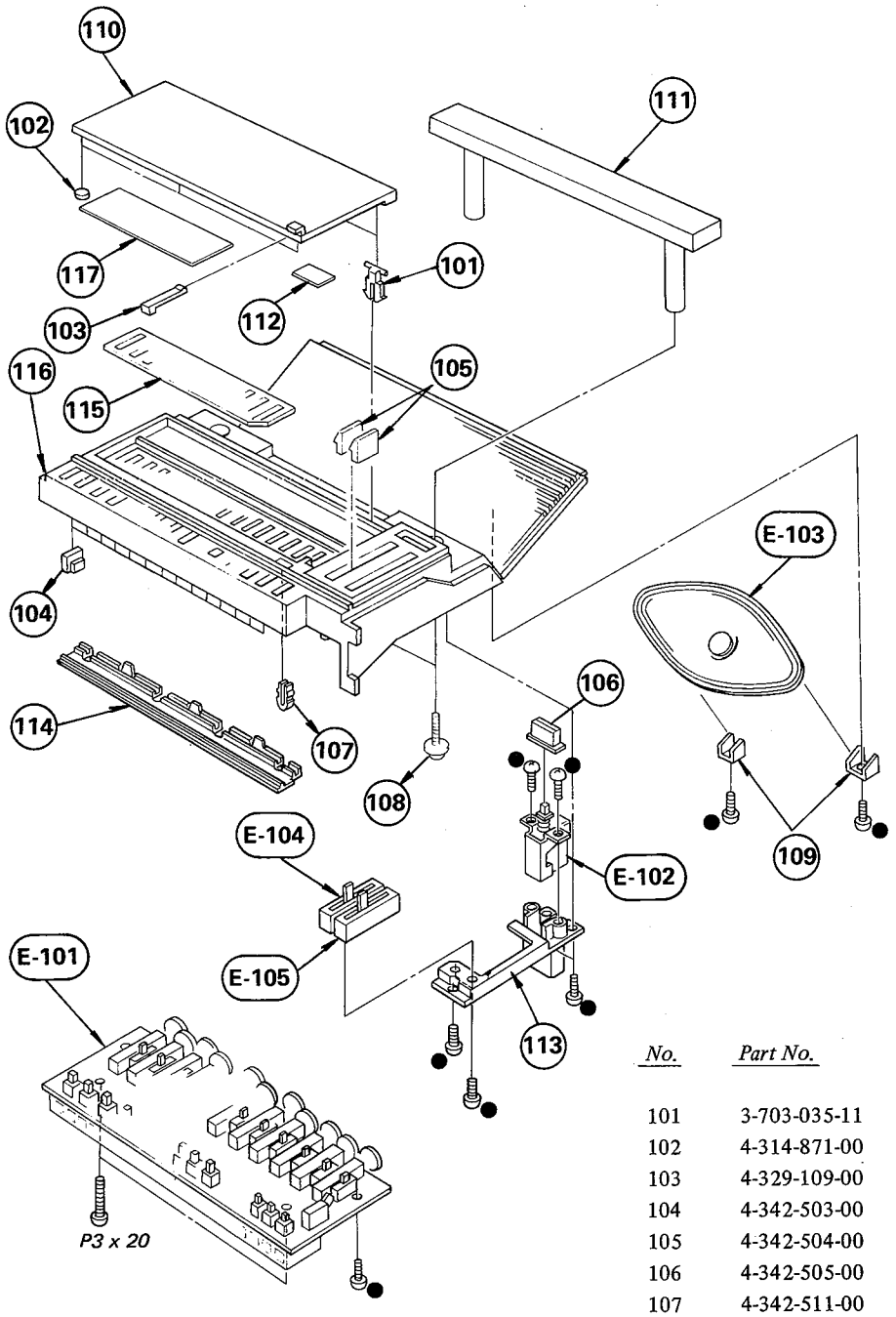


No.	Part No.	Description	Remark
51	3-701-353-00	Spacer, mica	
52	3-703-320-00	Bushing (A), transistor	
53	♦4-302-432-00	Bracket, transistor	
54	4-328-903-00	Bushing, heat sink	
55	♦4-335-311-00	Bracket, cement-coated resistor	
56	♦4-335-320-00	Ring, short, FBT	
57	4-342-512-00	Knob, V-HOLD	
58	♦4-342-533-00	Bracket (D)	
59	♦4-342-545-00	Heat sink	

A B C D

1 2 3 4 5

(3) M BOARD



No.	Part No.	Description	Remark
101	3-703-035-11	Shaft, lid	
102	4-314-871-00	Cushion	
103	4-329-109-00	Knob, AFT	
104	4-342-503-00	Button, sensor	
105	4-342-504-00	Knob, slide	
106	4-342-505-00	Button, POWER	
107	4-342-511-00	Retainer, door	
108	4-342-513-00	Tapping, flange	
109	4-342-514-00	Crew, retainer, speaker	
110	4-342-526-00	Door	
111	4-342-541-11	Handle	
112	4-344-102-00	Label, AFT	
113	♦4-344-106-00	Bracket, POWER	
114	4-344-107-00	Retainer, button	
115	4-344-111-00	Indicator, preset	
116	♦4-344-113-00	Bracket, M	
117	4-344-118-01	Label, preset explanation	

SECTION 7
ELECTRICAL PARTS LIST

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note:

- ⇒: Due to standardization, interchangeable replacements may be substituted for parts specified in the diagrams.
- Items marked "♦" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The components identified by ⊠ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

CAPACITORS

- All capacitors are in μF and ceramic unless otherwise noted. 50WV or less are not indicated except for electrolytics. p : μμF, elect: electrolytic

RESISTORS

- All resistors are in ohms. Common ¼W carbon resistors are omitted. Refer to the list on the last page for their part numbers.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
  kΩ : 1000Ω, MΩ : 1000kΩ

COILS

- All coils are microinductors unless otherwise noted.

A BOARD

Ref. No.	*Part No.*	*Description*	*Remark*
	♦A-1295-377-A	A Board complete	E-13
		CAPACITORS	
C013	1-108-377-00	0.01 100V mylar	
C014	1-108-381-00	0.022 100V mylar	
C015	1-123-353-00	2.2 50V elect	
C017	1-108-638-00	0.1 100V mylar	
C018	1-123-351-00	0.47 50V elect	
C019	1-123-316-00	10 16V elect	
C021	1-123-316-00	10 16V elect	
C022	1-123-351-00	0.47 50V elect	
C023, 024	1-108-377-00	0.01 100V mylar	
C025	1-123-586-00	0.1 50V elect	
C026	1-123-351-00	0.47 50V elect	
C201	1-101-888-00	68p	
C205, 206	1-102-121-00	0.0022	
C207	1-161-047-00	0.0047	
C208, 209	1-102-121-00	0.0022	
C211	1-108-638-00	0.1 100V mylar	
C212	1-123-353-00	2.2 50V elect	
C213	1-108-386-00	0.056 100V mylar	
C215, 216	1-102-503-00	3p	
C217	1-102-963-00	33p	
C218	1-161-282-00	18p	
C219, 220	1-102-121-00	0.0022	
C221	1-123-316-00	10 16V elect	

Ref. No.	Part No.	Description			Remark
C222	1-102-121-00	0.0022			
C225	1-101-006-00	0.047			
C226	1-161-294-00	12p			
C228	1-123-352-00	1	50V	elect	
C229	1-102-129-00	0.01			
C230	1-102-114-00	470p			
C231	1-108-379-00	0.015	100V	mylar	
C232	1-123-351-00	0.47	50V	elect	
C233	1-123-324-00	1000	16V	elect	
C239	1-123-352-00	1	50V	elect	
C240	1-102-496-00	82p			
C241	1-102-518-00	33p			
C242	1-102-494-00	68p			
C245A	1-161-279-00	10p			
C245B	1-102-074-00	0.001			
C302	1-161-271-00	100p			
C303	1-102-816-00	120p			
C304	1-121-806-00	10	16V	elect (nonpolarized)	
C308	1-101-004-00	0.01			
C309	1-102-820-00	330p			
C310	1-123-351-00	0.47	50V	elect	
C311	1-108-619-00	0.0027	100V	mylar	
C312	1-123-586-00	0.1	50V	elect	
C313	1-108-385-00	0.047	100V	mylar	
C314	1-123-316-00	10	16V	elect	
C315	1-123-354-00	3.3	50V	elect	
C316	1-102-963-00	33p			
C317	1-102-822-00	390p			
C318	1-123-447-00	0.22	50V	elect	
C319	1-123-328-00	4.7	25V	elect	
C320	1-123-447-00	0.22	50V	elect	
C321	1-101-888-00	68p			
C323	1-102-947-00	10p			
C324	1-102-959-00	22p			
C326	1-123-321-00	220	16V	elect	
C327	1-161-270-00	82p			
C328	1-161-271-00	100p			
C329	1-123-316-00	10	16V	elect	

Ref. No.	Part No.	Description	Remark
CF201	1-527-260-00	Ceramic Filter	
CF202	1-409-332-00	Ceramic 4.5MHz Trap	
CV301	1-141-212-00	Trimmer, 30p; COLOR SYNC	
		DIODES	
D011–016	8-719-815-55	1S1555	
⇒D017	8-719-162-07	RD6.2E	
D203, 204	8-719-815-55	1S1555	
⇒D301	8-719-200-02	10E2	
DL301	1-415-164-00	Delay Line	
		ICS	
IC011	8-759-113-63	μPC1363C	
IC012	8-759-157-40	μPC574J	
IC201	8-759-600-05	CX555A	
IC202	8-759-608-43	CX843	
IC301	8-759-105-56	CX556	
		COILS	
L011	1-407-163-XX	33μH	
L012	1-407-166-XX	56μH	
L013	1-407-716-00	820μH	
L014, 015	1-407-163-XX	33μH	
L201	1-407-158-XX	12μH	
L202	1-407-184-XX	3.3μH	
L203	1-407-189-XX	8.2μH	
L204	1-425-613-00	5T	
L302	1-407-162-XX	27μH	
L303	1-408-163-00	5.6mH	
L304	1-407-166-XX	56μH	
L305	1-407-162-XX	27μH	
L306	1-407-184-XX	3.3μH	
		TRANSISTORS	
⇒Q011	8-729-612-77	2SA1027R	
⇒Q013, 014	8-729-612-77	2SA1027R	
⇒Q015, 016	8-729-663-47	2SC1364	
⇒Q017	8-729-612-77	2SA1027R	

Ref. No.	Part No.	Description	Remark
⇒Q018	8-729-663-47	2SC1364	
Q019	8-723-302-00	2SK43	
⇒Q202	8-729-663-47	2SC1364	
⇒Q301	8-729-663-47	2SC1364	
	RESISTORS		
R306	1-202-735-00	22M ½W composition	
R038	1-206-688-00	10k 2W metal oxide (nonflammable)	
R039	1-244-909-00	33k ½W carbon	
R237	1-211-933-00	47 1/8W carbon (nonflammable)	
RV201	1-224-644-XX	4.7k, adjustable; RF AGC U	
RV202	1-224-644-XX	4.7k, adjustable; RF AGC V	
RV303	1-226-506-00	500, variable; BRIGHT	
RV304	1-224-644-XX	4.7k, adjustable; SUB. BRT	
RV305	1-224-146-00	10k, variable; COLOR	
RV306	1-224-146-00	10k, variable; HUE	
RV307	1-224-552-00	470k, adjustable; ACC	
RV308	1-224-644-XX	4.7k, adjustable; SUB CONTRAST	
S301	1-553-328-00	Switch, rotary; AUTO	
	TRANSFORMERS AND FILTERS		
T201	1-409-319-00	VIFT-T1 (39.75MHz)	
T202	1-409-318-00	VIFT-T2 (47.25MHz)	
T203	1-404-181-00	VIFT-T3 (41.25MHz)	
T204	1-404-182-00	VIFT-2	
T205	1-404-181-00	AFT-1	
T206	1-403-260-00	SIFT-1	
T207	1-403-871-00	SIFT-2	
T208	1-404-179-00	VIFT-1	
T301	1-425-995-00	BPT	
X301	1-527-396-00	Crystal, OSC	
	♦1-526-575-00	Socket, plug	

• Items marked "♦" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

Ref. No.	Part No.	Description	Remark
	C BOARD		
	♦A-1330-250-A	C Board complete	E-8
	♦1-588-959-00	C Board	
	CAPACITORS		
C701	1-123-356-00	10 50V elect	
C702	1-129-737-00	0.047 630V film	
C703	1-102-249-00	680p 2kV	
C704	1-102-971-00	82p	
	COILS		
L701–703	1-407-168-XX	82μH	
L704	1-407-172-XX	180μH	
	TRANSISTORS		
Q701–703	8-729-322-78	2SC2278	
	RESISTORS		
R703	1-206-692-00	15k 2W metal oxide (nonflammable)	
R706	1-206-692-00	15k 2W metal oxide (nonflammable)	
R709	1-206-692-00	15k 2W metal oxide (nonflammable)	
R710	1-202-585-00	3.3k ½W composition	
R712	1-212-360-00	1 1W metal oxide (nonflammable)	
R713	1-202-585-00	3.3k ½W composition	
R714	1-202-609-00	33k ½W composition	
R715	1-202-613-00	47k ½W composition	
R716	1-202-585-00	3.3k ½W composition	
R717	1-202-645-00	1M ½W composition	
R718	1-202-549-00	100 ½W composition	
R719	1-202-645-00	1M ½W composition	
R720	1-202-631-00	270k ½W composition	
R721	1-202-720-00	1.2M ½W composition	
R722	1-202-613-00	47k ½W composition	

Ref. No.	Part No.	Description	Remark
R723	1-244-929-00	220k ½W composition	
RV701	1-226-209-00	3.3k, adjustable; B. BKG	
RV702	1-224-640-XX	330, adjustable; B. DRIVE	
RV703	1-226-209-00	3.3k, adjustable; G. BKG	
RV704	1-224-640-XX	330, adjustable; G. DRIVE	
RV705	1-226-209-00	3.3k, adjustable; R. BKG	
RV706	1-226-063-00	2.2M, adjustable; SCRN	
RV707	1-226-114-00	2.2M, adjustable; FOCUS	
SG701–706	1-519-063-XX	Discharging Gap	
	1-526-086-XX	Socket, picture Tube	
	D BOARD		
	♦A-1345-280-A	D Board complete	E-51
	CAPACITORS		
C234	1-123-319-00	47 16V elect	
C501	1-123-352-00	1 50V elect	
C502	1-161-003-00	0.0015	
C503	1-123-352-00	1 50V elect	
C504	1-161-005-00	0.0022	
C505	1-123-354-00	3.3 50V elect	
C506	1-108-376-00	0.0082 100V mylar	
C507	1-161-025-00	0.1	
C508	1-130-203-00	0.01 film	
C509	1-108-373-00	0.0047 100V mylar	
C510	1-161-017-00	0.022	
C511	1-123-353-00	2.2 50V elect	
C512	1-123-351-00	0.47 50V elect	
C514	1-123-316-00	10 16V elect	
C515	1-161-047-00	0.0047	
C516	1-102-820-00	330p	
C517	1-102-030-00	330p 500V	
C518	1-108-374-00	0.0056 100V mylar	
C519	1-121-757-00	33 160V elect	
C520	1-123-333-00	100 25V elect	

• Items marked "♦" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

Ref. No.	Part No.	Description	Remark
C521	1-123-316-00	10 16V elect	
C522	1-108-369-00	0.0022 100V mylar	
C523	1-108-384-00	0.039 100V mylar	
C524	1-131-361-00	2.2 20V tantalum	
C525	1-123-319-00	47 16V elect	
C526	1-131-197-00	3.3 16V tantalum	
C527	1-108-377-00	0.01 100V mylar	
C528	1-108-386-00	0.056 100V mylar	
C529	1-123-344-00	47 35V elect	
C530	1-102-228-00	470p 500V	
C531	1-123-585-00	470 25V elect	
C532	1-123-584-00	22 16V elect	
C533	1-123-329-00	10 25V elect	
C535	1-130-162-00	0.33 200V polypropylene	
C536	1-102-212-00	820p 500V	
C537	1-108-373-00	0.0047 100V mylar	
C538	1-123-351-00	0.47 50V elect	
C539	1-123-346-00	220 35V elect	
C540	1-129-710-00	0.0047 630V film	
C541	1-101-845-00	0.001 500V	
C542	1-123-335-00	330 25V elect	
C544	1-123-386-00	33 100V elect	
C545	⚠1-130-562-00	7300p 1.2kV film	
C546	⚠1-108-961-00	0.15 200V film	
C548	1-102-223-00	4700p 1.6kV	
C549	1-121-246-00	4.7 160V elect	
C550	1-102-973-00	100p	
C551	1-108-383-00	0.033 100V mylar	
C555	1-102-125-00	0.0047	
C560	1-108-389-00	0.1 100V mylar	
C561	1-123-341-00	10 35V elect	
C581	1-161-009-00	0.0047	
C582	1-108-369-00	0.0022 100V mylar	
C601	⚠1-108-745-00	0.22 125V film	
C602	⚠1-161-748-00	0.0047 125V	
C605	1-125-221-00	470 200V elect	
C606	1-123-355-00	4.7 50V elect	
C607	1-123-269-00	4.7 160V elect	
C608	1-101-810-00	100p 500V	
C609	1-123-026-00	2.2 160V elect	

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description			Remark
C631	1-123-328-00	4.7	25V	elect	
C632	1-123-381-00	2.2	100V	elect	
C633	1-102-244-00	220p	500V		
C634	1-102-820-00	330p			
C635	1-123-254-00	10	160V	elect	
C636	1-108-369-00	0.0022	100V	mylar	
		DIODES			
⇒D202	8-719-113-07	RD13EB			
D501	8-719-815-55	1S1555			
⇒D502	8-719-156-25	RD5.6E-B2Z			
D504	8-719-815-55	1S1555			
⇒D505	8-719-911-55	U05G			
⇒D506	8-719-200-02	10E2			
⇒D507, 508	8-719-911-55	U05G			
⇒D509, 510	8-719-305-15	GH3F			
D511	⚠8-719-901-94	V19CS			
⇒D512, 513	8-719-305-15	GH3F			
⇒D601	8-719-911-55	U05G			
DVR601	⚠1-800-641-00	Varistor			
F601	⚠1-532-272-XX	Fuse, 5A			
F602	⚠1-532-570-00	Fuse, 1.25A			
		ICS			
IC501	8-759-105-57	CX557			
IC502	8-759-113-58	μPC1358H			
IC601	⚠1-231-462-00	Module, power			
		COILS			
L501	1-407-685-00	2.2μH			
L503	⚠1-459-292-00	HWC, H. SIZE			
L504	1-407-504-00	10mH			
L506	1-407-163-XX	33μH			
L509	1-407-365-00	0.7μH			
L601	⚠1-421-403-00	Coil, choke			
NL601	1-519-108-XX	Lamp, neon ass'y			

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description			Remark
		TRANSISTORS			
⇒Q203	8-760-413-10	2SC1475			
⇒Q501	8-729-663-47	2SC1364			
Q502	8-729-213-11	2SC2230A			
⇒Q503	8-729-663-47	2SC1364			
Q601	8-729-309-36	2SA893A			
Q602	8-729-383-03	MN8303			E-57
Q631	8-729-309-06	2SC1890A			
⇒Q632	8-762-020-00	2SA835			
⇒Q633	8-765-170-01	2SC1962			
		RESISTORS			
R243	1-213-124-00	27	1W	metal oxide (nonflammable)	
R519	1-206-680-00	4.7k	2W	metal oxide (nonflammable)	
R520	1-206-745-00	6.8k	3W	metal oxide (nonflammable)	
R528	1-214-147-00	4.3k	¼W	1% metal film	
R529	1-214-152-00	6.8k	¼W	1% metal film	
R534	1-213-127-00	47	1W	metal oxide (nonflammable)	
R537	1-212-362-00	1.5	1W	metal oxide (nonflammable)	
R543	1-213-129-00	68	1W	metal oxide (nonflammable)	
R545	1-247-032-00	68	1/8W	carbon (nonflammable)	
R546	1-247-009-00	470	¼W	carbon (nonflammable)	
R550	1-213-133-00	150	1W	metal oxide (nonflammable)	
R551	1-246-996-00	2.2k	1/8W	carbon (nonflammable)	
R554	1-246-979-00	1.2	1/8W	carbon (nonflammable)	
R555	1-213-143-00	1k	1W	metal oxide (nonflammable)	
R556	1-214-912-00	91k	½W	1% metal film	
R558	1-244-901-00	15k	½W	carbon	
R561	1-211-930-00	33	1/8W	carbon (nonflammable)	

Ref. No.	Part No.	Description			Remark
⧓R563	⚠		¼W	carbon	
R603	1-213-163-00	47k	1W	metal oxide (nonflammable)	
R605	1-211-929-00	82	1/8W	carbon (nonflammable)	
R606	1-213-157-00	15k	1W	metal oxide (nonflammable)	
R607	1-244-889-00	4.7k	½W	carbon	
R608	1-247-037-00	390	1/8W	carbon (nonflammable)	
R609	1-244-907-00	27k	½W	carbon	
R637	1-211-933-00	47	1/8W	carbon (nonflammable)	
R639, 640	1-244-875-00	33	½W	carbon (nonflammable)	
RV501	1-226-819-00	1k, adjustable; H. FREQ			
RV502	1-226-217-00	22k, adjustable; V. SIZE			
RV503	1-226-077-00	5k, variable; V. HOLD			
RV504	1-224-644-XX	4.7k, adjustable; PIN. AMP			
SG501	1-519-063-XX	Discharging Gap			
		TRANSFORMERS AND FILTERS			
T501	1-437-078-00	HDT			
T502	⚠1-421-351-00	H. PCT			
T503	⚠1-439-258-00	FBT			E-55
T601	⚠1-421-357-00	LFT			
T631	⚠1-427-438-00	SOT			
THP601	⚠1-800-686-00	Thermistor, positive			
	1-533-146-00	Holder, fuse			
		M BOARD			
	●A-1306-077-A	M Board complete			E-101
		DIODES			
D051–064	8-719-815-55	1S1555			

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
NL051–064	1-519-154-00	Lamp, neon; CHANNEL INDICATOR	
		RESISTORS	
RV051, 053, 055, 057, 059, 061, 063	1-226-190-11	100k, variable; CHANNEL PRESET	
RV052, 054, 056, 058, 060, 062, 064	1-226-190-21	100k, variable; CHANNEL PRESET	
S051–064	1-552-774-00	Switch, pushbutton; CHANNEL SELECT	
S065–078	1-552-339-00	Switch, slide; BAND SELECT	
S079	1-552-437-00	Switch, lever; AFT	
		S BOARD	
	●1-602-447-00	S Board	E-16
		CAPACITORS	
C101	1-123-330-00	22 25V elect	
C102, 103	1-123-329-00	10 25V elect	
C104	1-123-331-00	33 25V elect	
C105, 106	1-108-389-00	0.1 100V mylar	
		MISCELLANEOUS	
C901	⚠1-102-155-00	330p 2kV	
J901A, B	1-507-372-00	Jack; EARPHONE	E-3
L901, 902	⚠1-426-040-00	DGC	E-18
L903	1-407-365-00	0.7μF	
L905	⚠1-451-183-00	Deflection Yoke, DY	E-5
⇒Q901	8-729-287-00	2SD869	E-54
R901	⚠1-205-614-00	6.8 20W wirewound (nonflammable)	E-53
R902	1-205-613-00	220 20W wirewound (nonflammable)	E-52
RV901	1-226-064-00	50k, variable; VOLUME	E-105
RV902	1-226-861-00	10k, variable; PICTURE	E-104

● Items marked "●" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

Ref. No.	Part No.	Description	Remark
S901	⚠1-552-658-00	Switch, pushbutton POWER	E-102
SP901	1-502-466-XX	Speaker, 8Ω	E-103
V901	⚠8-737-901-05	Picture Tube 250AKB22	E-4
	⚠1-226-733-21	Resister Ass'y, high-voltage	E-10
	1-452-032-00	Magnet, disk; 10mm dia	E-1
	1-452-094-00	Magnet, rotatable disk; 15m dia	E-2
	1-452-112-31	Neck Ass'y, Picture Tube	E-7
	1-452-133-00	Magnet BMC	E-6
	⚠1-463-264-00	UHF/VHF TUNER (BT-852)	E-15
	1-501-152-00	Telescopic Antenna, type B	E-11
	⚠ 1-526-606-00	Cap, anode	E-9
	1-536-401-XX	L-Type Terminal strip	E-56
	⚠1-536-539-00	Terminal Board, antenna	E-12
•	1-551-249-00	Cable P-P	E-17
	⚠1-551-603-00	Cord, power	E-14
•	1-555-049-00	Feeder, solderless terminal	E-19
•	1-555-371-00	Cable, with pin	E-20

• Items marked "•" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

ACCESSORIES AND PACKING MATERIALS

Part No.	Description	Remark
Y-2063-103-0	AN-15 loop antenna	
1-504-034-32	Earphone, ME-20B	
3-701-352-00	Bag, polyethylene	
3-701-730-00	Bag, polyethylene, IBM card	
4-313-279-00	Bag, polyethylene	
4-334-319-00	Label (B), indicator	
4-342-551-00	Cushion, left upper	
4-342-552-00	Cushion, right upper	
4-342-553-00	Cushion, left lower	
4-342-554-00	Cushion, right lower	
4-344-117-00	Carton	
4-491-325-21	Card, warranty	
4-491-436-01	Schematic diagram	
4-495-953-21	Manual, instruction	
7-822-282-01	IBM; card (white)	
7-822-282-02	IBM, card (pink)	
7-822-282-03	IBM, card (green)	

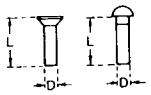
1/4 WATT CARBON RESISTORS

Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.
1.0	1-246-[illegible]00	10	1-246-425-00	100	1-246-449-00	1.0k	1-246-473-00	10k	1-246-497-00	100k	1-246-521-00	1.0M	1-246-545-00
1.1	1-246-[illegible]-00	11	1-246-426-00	110	1-246-450-00	1.1k	1-246-474-00	11k	1-246-498-00	110k	1-246-522-00	1.1M	1-210-814-00
1.2	1-246-[illegible]03-00	12	1-246-427-00	120	1-246-451-00	1.2k	1-246-475-00	12k	1-246-499-00	120k	1-246-523-00	1.2M	1-210-815-00
1.3	1-246-[illegible]404-00	13	1-246-428-00	130	1-246-452-00	1.3k	1-246-576-00	13k	1-246-500-00	130k	1-246-524-00	1.3M	1-210-816-00
1.5	1-246-405-00	15	1-246-429-00	150	1-246-453-00	1.5k	1-246-577-00	15k	1-246-501-00	150k	1-246-525-00	1.5M	1-210-817-00
1.6	1-246-406-00	16	1-246-430-00	160	1-246-454-00	1.6k	1-246-578-00	16k	1-246-502-00	160k	1-246-526-00	1.6M	1-210-818-00
1.8	1-246-407-00	18	1-246-431-00	180	1-246-455-00	1.8k	1-246-579-00	18k	1-246-503-00	180k	1-246-527-00	1.8M	1-210-819-00
2.0	1-246-408-00	20	1-246-432-00	200	1-246-456-00	2.0k	1-246-580-00	20k	1-246-504-00	200k	1-246-528-00	2.0M	1-210-820-00
2.2	1-246-409-00	22	1-246-433-00	220	1-246-457-00	2.2k	1-246-581-00	22k	1-246-505-00	220k	1-246-529-00	2.2M	1-210-821-00
2.4	1-246-410-00	24	1-246-434-00	240	1-246-458-00	2.4k	1-246-582-00	24k	1-246-506-00	240k	1-246-530-00	2.4M	1-244-754-00
2.7	1-246-411-00	27	1-246-435-00	270	1-246-459-00	2.7k	1-246-583-00	27k	1-246-507-00	270k	1-246-531-00	2.7M	1-244-755-00
3.0	1-246-412-00	30	1-246-436-00	300	1-246-460-00	3.0k	1-246-584-00	30k	1-246-508-00	300k	1-246-532-00	3.0M	1-244-756-00
3.3	1-246-413-00	33	1-246-437-00	330	1-246-461-00	3.3k	1-246-585-00	33k	1-246-509-00	330k	1-246-533-00	3.3M	1-244-757-00
3.6	1-246-414-00	36	1-246-438-00	360	1-246-462-00	3.6k	1-246-586-00	36k	1-246-510-00	360k	1-246-534-00	3.6M	1-244-758-00
3.9	1-246-415-00	39	1-246-439-00	390	1-246-463-00	3.9k	1-246-587-00	39k	1-246-511-00	390k	1-246-535-00	3.9M	1-244-759-00
4.3	1-246-416-00	43	1-246-440-00	430	1-246-464-00	4.3k	1-246-488-00	43k	1-246-512-00	430k	1-246-536-00	4.3M	1-244-760-00
4.7	1-246-417-00	47	1-246-441-00	470	1-246-465-00	4.7k	1-246-489-00	47k	1-246-513-00	470k	1-246-537-00	4.7M	1-244-761-00
5.1	1-246-418-00	51	1-246-442-00	510	1-246-466-00	5.1k	1-246-490-00	51k	1-246-514-00	510k	1-246-538-00	5.1M	1-244-762-00
5.6	1-246-419-00	56	1-246-443-00	560	1-246-467-00	5.6k	1-246-491-00	56k	1-246-515-00	560k	1-246-539-00		
6.2	1-246-420-00	62	1-246-444-00	620	1-246-468-00	6.2k	1-246-492-00	62k	1-246-516-00	620k	1-246-540-00		
6.8	1-246-421-00	68	1-246-445-00	680	1-246-469-00	6.8k	1-246-493-00	68k	1-246-517-00	680k	1-246-541-00		
7.5	1-246-422-00	75	1-246-446-00	750	1-246-470-00	7.5k	1-246-494-00	75k	1-246-518-00	750k	1-246-542-00		
8.2	1-246-423-00	82	1-246-447-00	820	1-246-471-00	8.2k	1-246-495-00	82k	1-246-519-00	820k	1-246-543-00		
9.1	1-246-424-00	91	1-246-448-00	910	1-246-472-00	9.1k	1-246-496-00	91k	1-246-520-00	910k	1-246-544-00		

HARDWARE NOMENCLATURE

Screw:

P 3 x 10
- *L: Length in mm*
- *D: Diameter in mm*
- *Type of head*
- *Indicated slotted-head only. Unless otherwise indicated, it means cross-recessed head (Phillips type).*



Nut, Washer, Retaining ring:

N 3
- *Diameter of usable screw or shaft*
- *Reference designation*

Reference Designation	Shape	Description	Remarks
		SCREWS	
P		pan-head screw	binding-head (B) screw for replacement
PWH		pan-head screw with washer face	binding-head (B) screw and flat washer for replacement
PS PSP		pan-head screw with spring washer	binding-head (B) screw and spring washer for replacement
PSW PSPW		pan-head screw with spring and flat washers	binding-head (B) screw and spring and flat washers for replacement
R		round-head screw	binding-head (B) screw for replacement
K		flat-countersunk-head screw	
RK		oval-countersunk-head screw	
B		binding-head screw	
T		truss-head screw	binding-head (B) screw for replacement
F		flat-fillister-head screw	
RF		fillister-head screw	
BV		braizer-head screw	

Reference Designation	Shape	Description	Remarks
		SELF-TAPPING SCREWS	
TA		self-tapping screw	ex: TA, P 3 x 10
PTP		pan-head self-tapping screw	binding-head self-tapping (TA, B) screw for replacement
PTPWH		pan-head self-tapping screw with washer face	binding-head self tapping (TA, B) screw and flat washer for replacement
PTTWH		pan-head thread-rolling screw with washer face	binding-head (B) screw and flat washer for replacement
		SET SCREWS	
SC		set screw	
SC		hexagon-socket set screw	ex: SC 2.6 x 4, hexagon socket
		NUT	
N		nut	
		WASHERS	
W		flat washer	
SW		spring washer	
LW		internal-tooth lock washer	ex: LW3, internal
LW		external-tooth lock washer	ex: LW3, external
		RETAINING RINGS	
E		retaining ring	
G		grip-type retaining ring	

© 1980

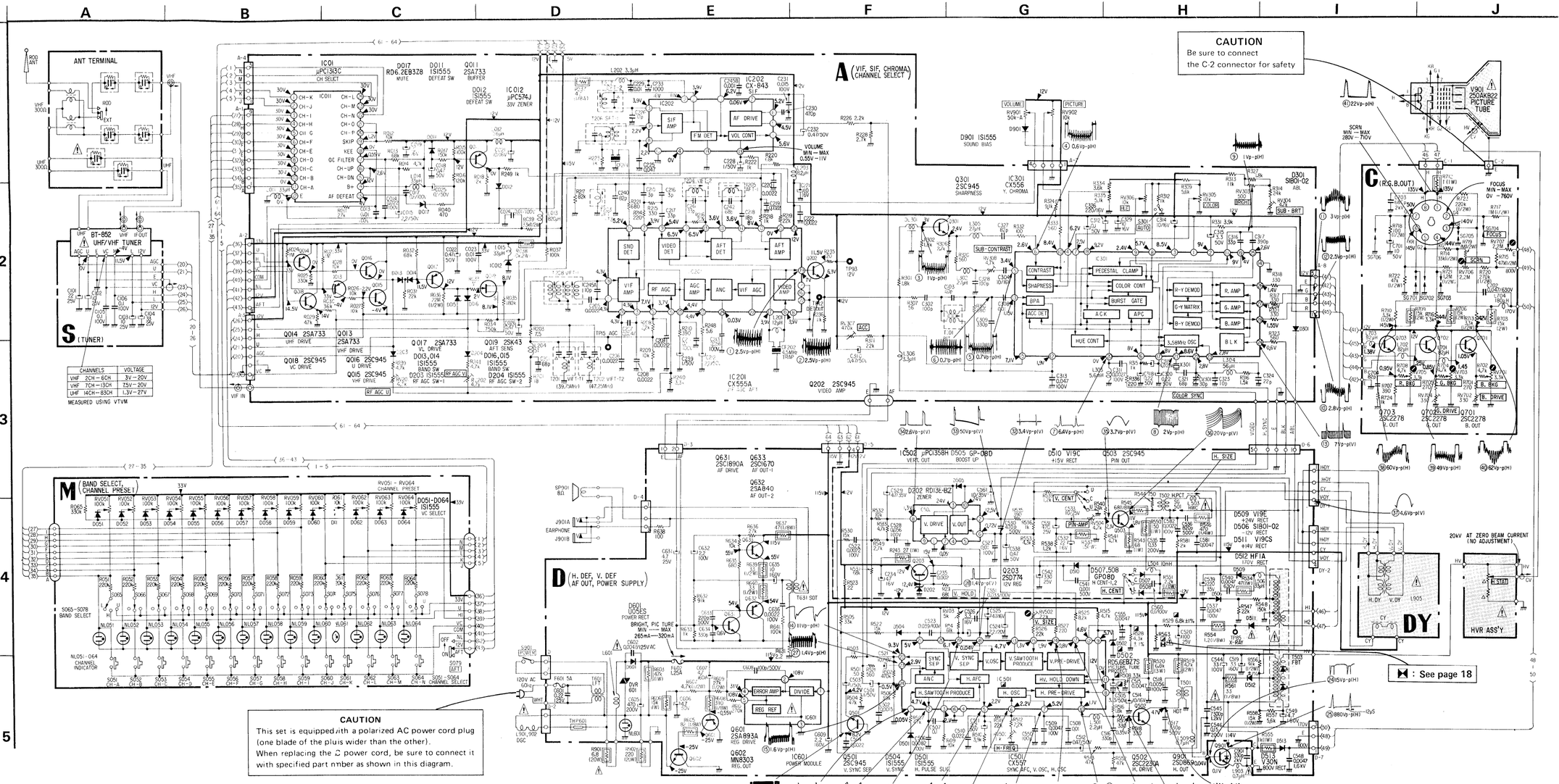
5-3. SCHEMATIC DIAGRAM

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics.
- All resistors are in ohms, ¼ W unless otherwise noted. kΩ : 1000 Ω, MΩ : 1000 kΩ
- [RW] : nonflammable resistor.
- △ : internal component.
- [ ] : panel designation.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- The components identified by ⋈ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- When replacing components identified by ◪ , make the necessary adjustments indicated. If results do not meet the specified value, change the component identified by ⋈ and repeat the adjustment until the specified value is achieved. (Refer to R563 adjustment on page 18).
  When replacing the part in below table, be sure to perform the related adjustment.

Part replaced (◪)	Adjustment
C505, D502, R508 R528, R529, R563 IC501	R563 adjustment

- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken with a 20,000-ohm-per-volt VOM.
- [ ] : adjustment for repair.
- Readings are taken with a color-bar signal input.
- Voltages on M2 board are taken with set selected to channel A and to VHF low band position.
- Voltage variations may be noted due to normal production tolerances.
- ⊘ : adjustable without removing cabinet.
- Voltage on A and S boards are taken with set selected to channel A and to VHF low band position.


A (VIF, SIF, CHROMA) CHANNEL SELECT
S (TUNER)
M (BAND SELECT, CHANNEL PRESET)
D (H. DEF, V. DEF AF OUT, POWER SUPPLY)
C (R,G,B OUT)
DY
CAUTION
Be sure to connect the C-2 connector for safety
CAUTION
This set is equipped with a polarized AC power cord plug (one blade of the pluis wider than the other).
When replacing the power cord, be sure to connect it with specified part number as shown in this diagram.
: See page 18

SONY TRINITRON® COLOR TV

KV-9400

US Model

Chassis No. SCC-274A-A

WARNING !!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.
THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

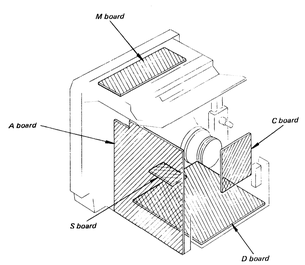
SAFETY RELATED COMPONENT WARNING !!

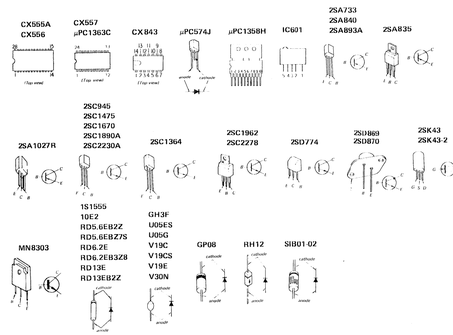
COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

CAUTION

- Avoid rubbing the inked surface.
- Do not allow the paper to contact hot power resistor, soldering irons, etc.

CIRCUIT BOARDS LOCATION





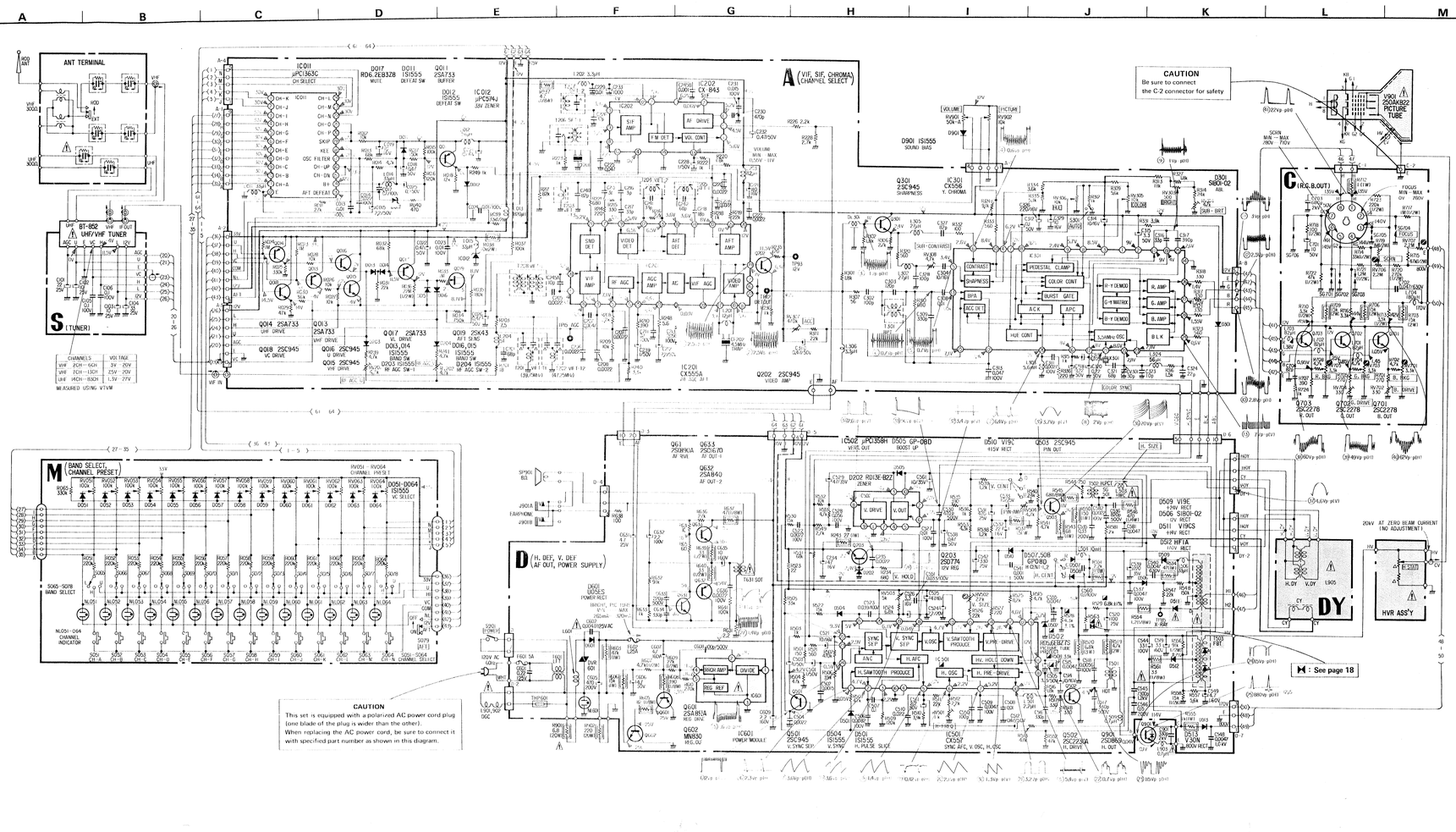
SCHEMATIC DIAGRAM

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics.
- All resistors are in ohms, ¼W unless otherwise noted. kΩ : 1000 Ω, MΩ : 1000 kΩ
- fusible resistor.
- ⚠ : internal component.
- [ ] : panel designation.
- ⅀ variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- The components identified by ⋈ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- When replacing components identified by ⚠, make the necessary adjustments indicated. If results do not meet the specified value, change the component identified by ⋈ and repeat the adjustment until the specified value is achieved. (Refer to R563 adjustment on page 18).
  When replacing the part in below table, be sure to perform the related adjustment.

Part replaced (⚠)	Adjustment
C505, D502, R508 R528, R529, R563 IC501	R563 adjustment

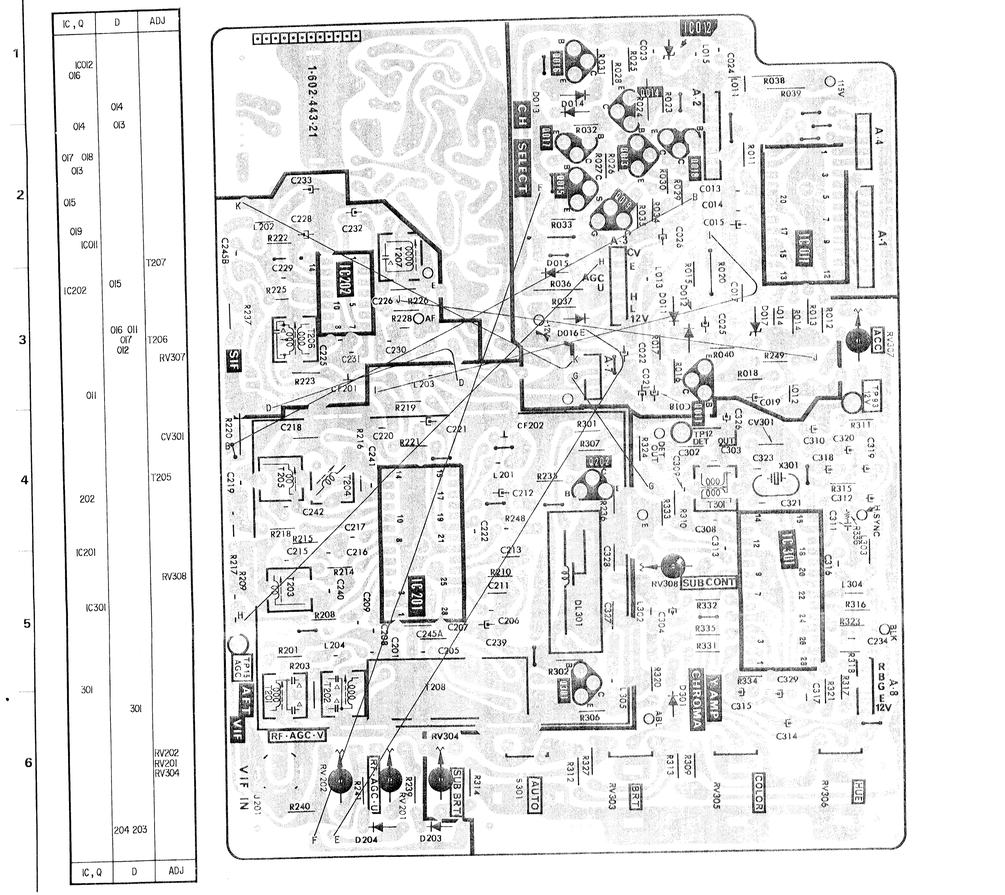
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken with a 20,000-ohm per-volt VOM.
- [ ] : adjustment for repair.
- Readings are taken with a color-bar signal input.
- Voltages on M2 board are taken with set selected to channel A and to VHF low band position.
- Voltage variations may be noted due to normal production tolerances.
- ⟨⟩ : adjustable without removing cabinet.
- Voltage on A and S boards are taken with set selected to channel A and to VHF low band position.



MOUNTING DIAGRAM

Note: ● ⟷ indicate a jumper.

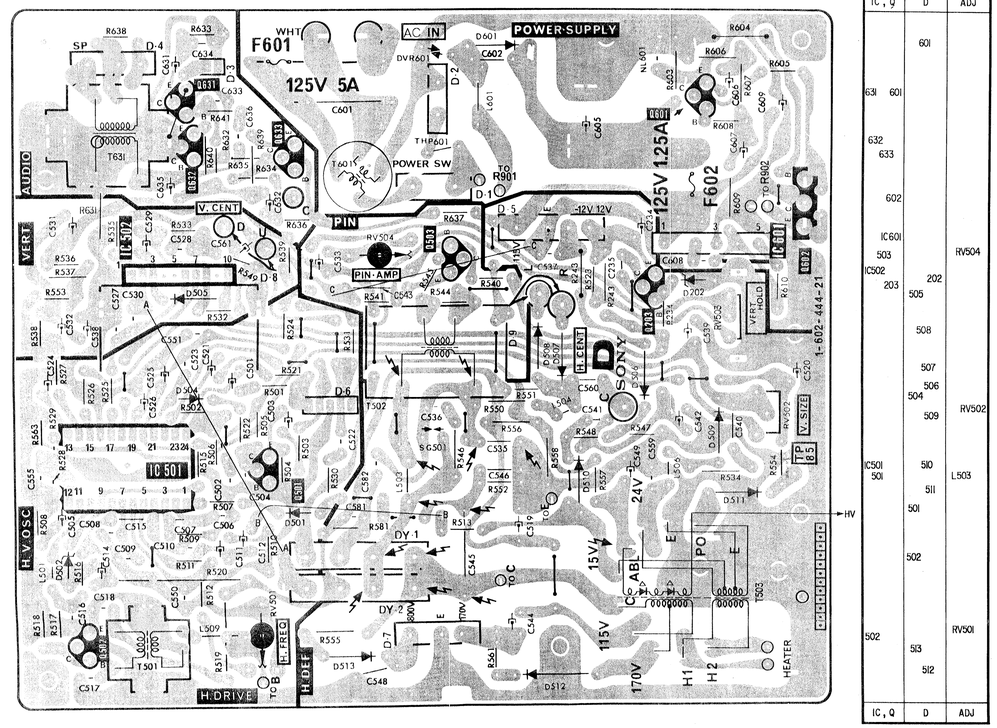
A [VIF, SIF, CHROMA, CHANNEL SELECT]



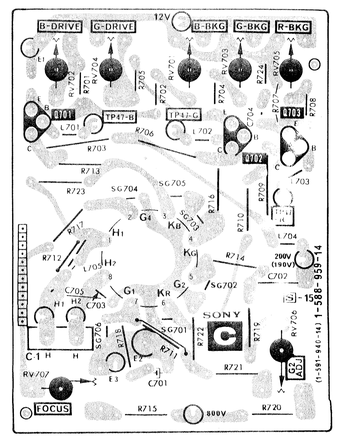
IC, Q	D	ADJ
IC012 Q16		
	D14	
Q14	D13	
Q17 Q18 Q13		
Q15		
Q19		T207
IC011	D15	
IC202		
	D16 Q11 Q17 Q12	T206 RV307
Q11		
		CV301
		T205
202		
IC201		RV308
IC301		
301	301	RV202 RV201 RV304
	204 203	

IC, Q	D	ADJ
	601	
631 601		
632		
633		
602		
IC601		
503		RV504
IC502	202	
203	505	
	508	
	507	
	506	
	504	RV502
	509	
IC501	510	
501	511	L.503
	501	
	502	
502		RV501
	513	
	512	

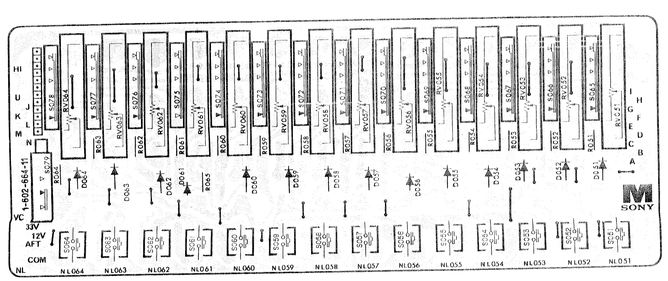
D [H. DEF, V. DEF, AF OUT, POWER SUPPLY]



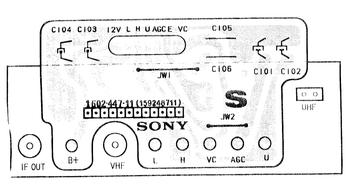
C [R, G, B OUT]



M [BAND SELECT, CHANNEL PRESET]



S [TUNER]



9-96595-71

Sony Corporation
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80C0244-1
Printed in Japan

CX555A
CX556

2SA1027R

MN8303

CX557
µPC1363C

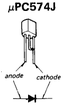
2SC945
2SC1475
2SC1670
2SC1890A
2SC2230A

1S1555
10E2
RD5.6EB2Z
RD5.6EBZ7S
RD6.2E
RD6.2EB3Z8
RD13E
RD13EB2Z

CX843

2SC1364

µPC574J



2SC1962
2SC2278

GH3F
U05ES
U05G
V19C
V19CS
V19E
V30N

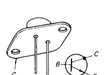
µPC1358H

2SD774

GP08

IC601

2SD869
2SD870



RH12

2SA733
2SA840
2SA893A

2SK43
2SK43-2

S1B01-02

2SA835

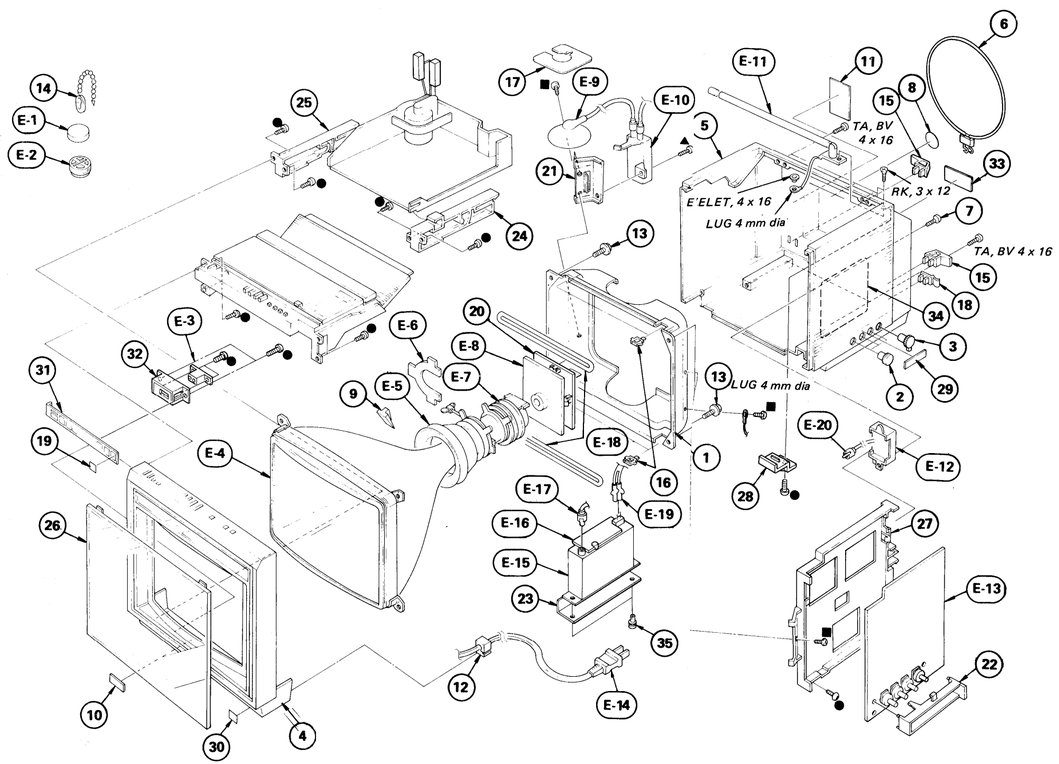
SECTION 6
EXPLODED VIEWS

(1) CABINET

Note

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- All screws are Phillips (cross recess) type unless otherwise noted.
  (—) = slotted head
  ■ : TA, BV3 x 8
  ● : TA, BV3 x 12
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- As to the part numbered with E-, refer to the electrical parts list.
- Items marked "♦" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.



No.	Part No.	Description	Remark
1	♦ X-4325-705-0	Picture tube shield ass'y	
2	X-4342-502-0	Knob ass'y, adjustment	
3	X-4344-101-0	Knob ass'y, selection	
4	X-4344-103-0	Mask ass'y	10
5	X-4344-104-0	Cabinet ass'y	15, 18, 29
6	Y-2063-103-0	AN-15 loop antenna	
7	3-701-809-41	Screw, terminal	
8	3-701-915-01	Label, UL	
9	3-703-003-00	Spacer, DY	
10	♦ 3-703-352-00	Emblem, SONY	
11	♦ 4-010-023-04	Label, X-RAY	
12	⚠ 4-022-115-00	Holder, power cord	
13	4-307-249-00	TA, 5x20	
14	4-308-870-00	Clip lead wire	
15	4-316-003-00	Holder, cord	
16	♦ 4-316-015-00	Holder, wire	
17	4-325-721-11	Cover, anode	
18	4-329-127-00	Clamper, cord	
19	4-334-320-00	Label (A), indicator	
20	4-335-329-00	Insulator, C board	
21	♦ 4-342-506-00	Bracket, HV	
22	♦ 4-342-507-11	Cover, control	
23	♦ 4-342-522-00	Insulator (M)	
24	♦ 4-342-531-00	Stay (right)	
25	♦ 4-342-532-00	Stay (left)	
26	4-342-540-00	Filter	
27	♦ 4-342-546-11	Bracket, A	
28	♦ 4-344-103-00	Retainer, antenna	
29	♦ 4-344-104-00	Label, VR	
30	♦ 4-344-105-00	Label, KV	
31	4-344-108-00	Holder, dial scale	
32	4-344-109-00	Cover, jack	
33	4-344-115-00	Label, model number	
34	4-344-116-00	Label, parts location	
35	4-812-134-00	Rivet nylon, 3.5	